HOW GREEN IS YOUR MAC?

Macworld

www.macworld.com | April 2009

Apple's New Face

In-Depth Reviews of **iLife '09** & **iWork '09**

HOW TO

- Troubleshoot Your MacBook
- Improve Your E-mail Manners

$6.99 U.S.
0 4>
0 70989 06924 4

www.macsales.com

Other World Computing
Serving the Mac Universe since 1988

From One of a Kind Products

The First and Only Tablet Based Mac

Unleash your creativity.

AXIOTRON modbook
www.macsales.com/modbook
Configure yours from ~~$2249~~ **Now $2149**
Modservice 'Bring Your Own MacBook' from ~~$1299~~ **Now $1149***

Macworld BEST OF SHOW 2007

MACTECH macsimum news BEST OF SHOW MACWORLD EXPO 2009

$100 off full solutions, $150 off Modservice through April 30th
**Includes Packaging + 2-Day Pickup & 2-Day Return Delivery Turnkey Conversion service*

To Award-Winning Service

GOLD HONOREE 5th Year in a Row! BizRate 2008

The First Name in Mac Memory

Memory Upgrade Solutions for all Macs – Up to 32GB!

The right options for Power Macs, iBooks, eMac, PowerBooks, Mac Pro, iMac, MacBook, and MacBook Pro.

4.0GB Kits from $54.99

Our online guide makes getting that right memory for your Mac easy.
www.macsales.com/memory

All OWC® memory meets or exceeds manufacturer specifications for maximum quality assurance, but at the independent prices you can afford. Plus, you receive the industry-leading **Lifetime Advance Replacement Warranty** and award-winning US-based customer support.

Visit: **www.macsales.com** *Call:* **800.275.4576**

OWC and OWC logo are registered trademarks and Other World Computing are trademarks of Other World Computing. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice. Artwork by professional comic book artist & designer Kody Chamberlain.

www.macsales.com/storage

Other World Computing
Serving the Mac Universe since 1988

OWC® & NewerTech® Storage Solutions

NOW FEATURING Hitachi® 1.0TB Deskstar™ E7K1000

HIGH CAPACITY
OWC Mercury Elite-AL Pro™

PERFORMANCE RAID
OWC Mercury Elite-AL
Pro Dual Drive RAID

DATA REDUNDANT
NewerTech
Guardian MAXimus®

HARD DRIVE & HUB
NewerTech miniStack®

ULTIMATE CAPACITY
OWC Mercury Rack Pro™

The Enterprise-class Hitachi E7K1000 is the fastest, quietest, lowest power-consuming 1.0TB Enterprise drive available and is now available in OWC and NewerTech storage solutions: 1.0TB, 2.0TB, and 4.0TB capacities from **$179.99***

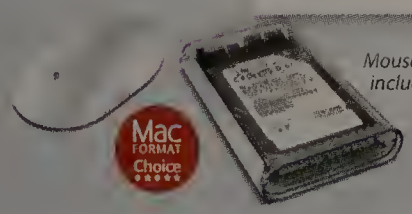
HITACHI

*Price After Hitachi Rebate

SPECIAL
NOW SAVE AN ADDITIONAL
$20 per 1.0TB
(up to $80 per solution)
with Hitachi rebates exclusively for OWC & NewerTech solutions featuring the new E7K1000 Enterprise drives.
www.macsales.com/rebates

OWC Mercury On-The-Go Pro™ 500GB Solutions from $139.99

BUS POWERED



Mouse not included.

FireWire® 800, FireWire 400, and/or USB 2.0 options

Now featuring the Hitachi TravelStar™ 5K500.B – The **first** and currently **only** 500GB 'Halogen-Free' notebook drive. *Super fast* and super environmentally friendly!

OWC Mercury On-The-Go Pro solutions available from **$67.99**

"...performs at some of the fastest speeds we've seen in a portable drive." - Macworld

Macworld Photoshop User

All OWC & NewerTech configured external drive solutions come ready to Plug and Play with all interface connection cables, include full versions of Intech "HD Speedtools", NovaStor NovaBACKUP and Prosoft Data Backup 3 *(a $200 value!)*, and are Leopard™ Time Machine™ ready

PROSOFT intech

BOOT AND SWAP DRIVES AT WILL

Hard drive not included.

Data Access *Now* Made Simple!

NewerTech Voyager™ SATA I/II hard drive docking solutions support all 2.5" and 3.5" hard drives up to 2.0TB!

Plug and Play, Hot Swap, and add a new drive at anytime. Offers flash memory card like ease of use, but with huge capacity gains.

www.macsales.com/newertech

Voyager Q
FW800/400+ USB2.0+eSATA
only **$99.95**

Voyager S2
USB2.0+eSATA
only **$59.99**

Experience the OWC difference

- *Free online installation videos.*
- *Free lifetime U.S. based technical support.*
- *Industry leading warranty terms.*
- *Live Chat support...even an weekends.*
- *Expert installation services with fast turnaround.*
- *Award-winning support...BizRate Circle of Excellence 5 straight years.*

GOLD HONOREE — 5th Year In a Row! BizRate 2008

At OWC Our Customers Come 1st!

Quality Products
Competitive Prices
Expert Support

McAfee SECURE

Learn more about OWC's new 'Green' Headquarters.
Conservation & Recycling for a greener tomorrow
http://www.macsales.com/LEED/

School/Corporate Purchase Orders accepted with approved credit.

DISCOVER MasterCard VISA JCB PayPal

Visit: **www.macsales.com** *Call:* **800.275.4576**

OWC and OWC logo are registered trademarks and Mercury On-The-Go Pro, Mercury Elite-AL Pro, Mercury Rack Pro, and Other World Computing are trademarks of Other World Computing. NewerTech, miniStack, and Guardian MAXimus are registered trademarks and Voyager is a trademark of Newer Technology, Inc. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice.

Amp Up Your Stuff!™

Total Mac customization and the coolest offers!

6 Months Same as Cash!
Valid for purchases over $500. Call for details.

Up to $200 Cash Back!*
On Apple computers. After mail-in rebate.

FREE Parallels Desktop!*
After mail-in rebate with purchase of an Apple computer.

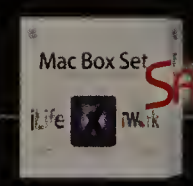
NEW 13" Aluminum MacBook
2GHz with 2GB SDRAM and 160GB Hard Drive
FREE Parallels Desktop!* *Includes NEW iLife '09!*

$1294 - $50 mail-in rebate* = **$1244!** #7684018
*After mail-in rebate. See our two-page ad inside this magazine.

SAVE $100!
15" MacBook™ Pro 2.4GHz
2GB SDRAM and 250GB HD
Includes NEW iLife '09!
FREE Parallels Desktop!*
$1994 - $100 = **$1894!***
#7684020 *After mail-in rebate.

SAVE $50!
13" MacBook™ (White) 2GHz
2GB SDRAM and 120GB HD
Includes NEW iLife '09!
FREE Parallels Desktop!*
$994 - $50 = **$944!***
#7739823 *After mail-in rebate.

SAVE $644!
13" MacBook™ Air 1.6GHz
80GB Hard Drive
FREE Parallels Desktop!*
original price $1794
$1249.99 - $100 = **$1149.99!***
#7373085 *After mail-in rebate.



SAVE $20!
Mac Box Set
Includes Mac OS X v10.5 Leopard®, NEW iLife '09 and NEW iWork™ '09
was $169
only **$148.99!** #7732917

SAVE $32!
500GB Rugged Hard Disk
FireWire 800, FireWire 400 and USB 2.0 inputs
was $179.99
now **$147.99!** #7505442

Authorized Reseller

*See our two-page ad inside this magazine.
Source code: MACWORLD

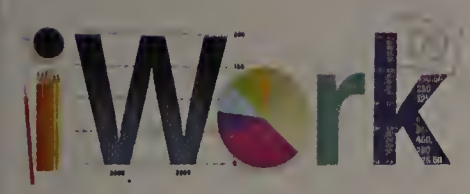
MacMall
Your #1 Apple Superstore!

Call 1-800-321-7532 or visit macmall.com

Incorporating MacUser

Macworld

16
MIA: Push Notification



24

31

On the Cover
Photograph by Peter Belanger

CONTENTS

April 2009

OPINION

6 From the Editor's Desk
Apple hasn't made a netbook—yet. What would it look like if Apple did?

12 Feedback
Readers respond.

MAC USER

16 MIA: Push Notification
What happened to Apple's promised iPhone feature?

18 Flash on the iPhone Is a 'Hard Technical Challenge'
Adobe is still working on an optimized version.

20 What's behind the Mac Box Set?
Nicely priced combo pack benefits Apple as well.

21 Hot Stuff
Check out the cool stuff we're into right now.

REVIEWS

24 iWork '09
Our reviewers take Apple's updated Pages, Numbers, and Keynote for a spin and let you know what they really think.

31 macworld.com/reviews
We're constantly reviewing the latest Mac hardware and software on Macworld.com. Here are quick summaries of this month's online exclusives.

34 App Store Selections
The App Store features thousands of applications for your iPhone and iPod touch. Each month, we review the software that's caught our eye.

36 Top Products
Looking for a new printer, monitor, digital camera, or other hardware? Check out our current favorites, as well as a complete listing of all current Macs and iPods.

38 Mac Gems
Find out how much space your files occupy, rip DVDs easily and effectively, open a link in any browser you want, and more.

CONTENTS April 2009

COVER STORY

42 Beyond the Box
With face recognition, speedy video-editing tools, and more, iLife '09 has the potential to change the way you work with your media. We review the new suite to see how it measures up.

FEATURE

55 How Green Is Your Mac?
Apple has been touting how eco-minded its products are. But how earth-friendly are they? Plus: what you can do to reduce your Mac's environmental footprint.

SECRETS

64 Working Mac
Brush up on your e-mail etiquette to make sure you don't offend when you click on Send.

68 Playlist
Use tags from the iTunes Store to tidy up your ripped music.

70 Create
Whether you're looking for work or being a social butterfly, online printing services can help you create custom calling cards that stand out in a crowd.

72 Mobile Mac
From touchy trackpads to balky batteries, here's how to troubleshoot common MacBook problems.

74 Recording Studio
Getting high-quality audio into your Mac can be difficult. We show you how.

HELP DESK

76 Mac OS X Hints
Use a keyboard shortcut to switch e-mail sending accounts, learn iPhoto thumbnail tricks, export text from all your Stickies notes, and more.

78 Mac 911
Ensure everyone can open your e-mail attachments, get savvy about Mac security risks, remove unwanted names from Address Book labels, and more.

BACK PAGE

96 Spotlight
The movie and TV industries could learn something from the music business about digital downloads.

42 Beyond the Box

55 How Green Is Your Mac?

MACWORLD.COM'S TOP 5

The top 5 stories on Macworld.com are:

1 Macworld Expo Keynote 2009: Live Update
Jason Snell and Dan Moren blog live from the keynote address at Macworld Expo (macworld.com/4366).

2 Macworld Expo Best of Show 2009
Our editors pick the coolest new products on display on the Expo show floor (macworld.com/4367).

3 Apple Releases iPhone Software 2.2.1
Apple releases an update improving Safari's performance and fixing a mail issue (macworld.com/4368).

4 The Mac Timeline: Hits and Misses
A slide show takes a look back at 25 years of Apple innovation (macworld.com/4369).

5 Review: Numbers '09
Vast number-crunching enhancements improve Apple's spreadsheet application (macworld.com/4370).

(Ranking valid as of February 1, 2009.)

iHome®

Live Life Loud™

The world's first computer speakers for iPhone & iPod.

sync with style™

ihomeaudio.com

Made for iPod

Works with iPhone

Available at

Apple Store Brookstone

Reson8 Sound Chamber Technology

iHome and Reson8 are registered trademarks of SDI Technologies, Inc. iPod and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.

 By Jason Snell

Netbook or Bust

Want Apple to make a cheap notebook? Get used to disappointment.

The computer industry is abuzz with "netbooks," those tiny, dirt-cheap laptops made by companies such as Asus and MSI. And, as you might expect, everyone's wondering why Apple doesn't make one.

Apple is coy on the topic. In late January, Apple COO Tim Cook said that the company was "watching that space...we've got some ideas here." But, Cook warned, "right now, we think the products...are inferior and will not provide an experience [that] customers are happy with" (macworld.com/4414).

You can buy a typical netbook—the MSI Wind U100 (macworld.com/4415)—on Amazon.com for about $300. (I recently did so myself.) What you get is the definition of *inferior:* a single-core 1.6GHz Intel Atom processor, 1GB of RAM, a 120GB hard drive, a tiny 10-inch screen, a shrunken keyboard, and no optical drive. In Mac terms, it's noticeably slower than a four-year-old PowerBook G4.

So why the hubbub about netbooks? Because their low prices make them appealing as second (or third, or fourth) computers. A netbook is the kind of machine you could keep under the couch just for looking up an actor's name on IMDb. Or one you could buy for your kids without worrying that they'll destroy it.

Attention Netbook Shoppers

Apple could certainly make a cheap netbook if it wanted to. But Apple has never competed with the cheapest products in any market, for two reasons: its brand represents high quality, and its finances demand a decent profit margin on every product it sells.

If you look at the laptops Apple has made over the past decade, you can see that some features are inviolate. As in the ultralight MacBook Air, the optical drive can go, but not the full-size keyboard or wide-screen display.

What Apple is saying is, 'Nobody will do netbooks right—until we do.'

My hands get tired after even a short spell of typing on the Wind's tiny keyboard. And its ten-inch display, while surprisingly readable, is so small that many modern programs (including iMovie) can't fit on it.

So, though part of me wishes that Apple would make a $500 laptop (perhaps in the design style of the original white iBook or the 12-inch PowerBook G4), I just don't see it happening, especially not when the company has a much better alternative.

Touch the Netbook

In October 2008, Steve Jobs declared that the iPhone was Apple's entry into the netbook category. At the same time, foreshadowing Cook's later statement, he said that Apple had some "pretty good" ideas for the category if it really took off (macworld.com/4417).

For a company that prides itself on secrecy, those statements can be read as screams of confirmation. Apple is working on some kind of easy, low-cost way to interact with information, something beyond the iPhone and the iPod touch. When Cook said that current netbooks are inferior, he echoed what Jobs said about handheld video players—right before he introduced the video iPod. What the company is saying is, "Nobody will do netbooks right—until we do."

That's why, if I were a betting man, I'd say the most likely scenario is Apple creating a big iPod touch. Imagine an iPhone-like device with a touch screen four times the size of the iPhone's—roughly 8.5 by 5 inches, much smaller than any netbook.

Such a device probably wouldn't have a built-in keyboard, but it would let you type on a larger version of the iPhone's touch-screen keyboard or perhaps let you attach an external keyboard for serious typing action. You could use it to check e-mail and surf the Web, just as you can on today's iPhone and iPod touch. And presumably third-party developers would be able to sell apps for it.

What would such a device cost? It probably wouldn't be anything close to the $300 you'd pay for an MSI Wind—but, again, Apple's not in the business of creating supercheap products for the bottom of the market. But would a $500 iPhone OS–based tablet netbook sell? You know, I think it would.

Forecasting the future directions of Apple product lines is a perilous business. By the time you read this, it's entirely possible that Apple may have announced a cheaper, smaller MacBook. But after watching the way the company has operated for the past decade, I'd guess that Apple won't be copying the netbook as defined by other companies. It's far more likely that Apple will be *redefining* it.

What do you think? Would you pay $500 for a supersize iPhone-like netbook? Send your ideas to me at jason_snell@macworld.com, or join in on the conversation at the Macworld forums (forums.macworld.com).

PHOTOGRAPH BY PETER BELANGER

TECHTOOL PRO 5

Problems?
Fix them yourself and save money on costly repair bills.

Save Money! Install TechTool Pro Now!

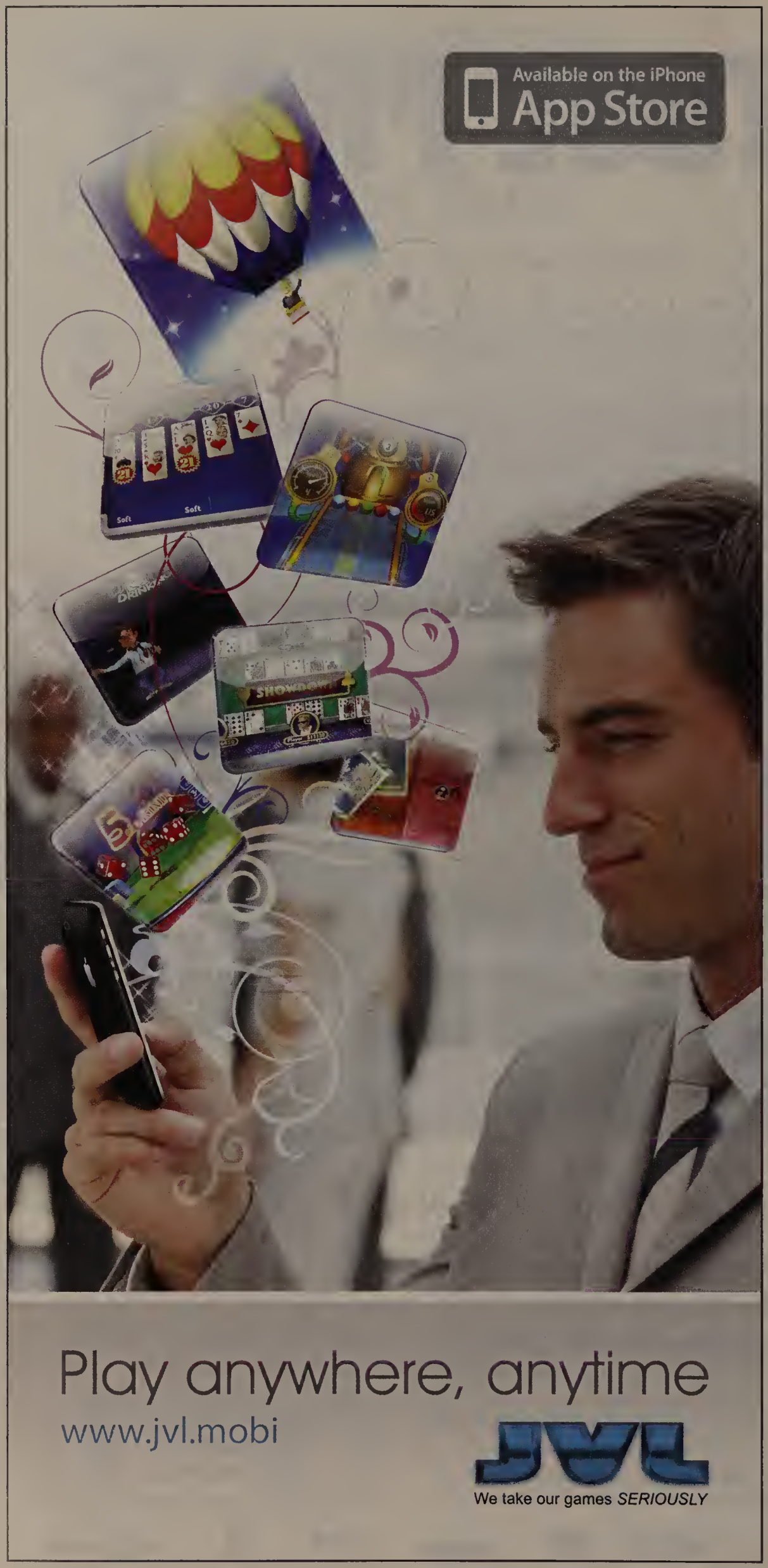
- Keep your computer running smoothly.
- Help prevent problems in the future.
- Fix most of your problems on the spot.

Mac Universal

Micromat, Inc., 5329 Skylane Blvd., Santa Rosa, CA 95403, USA
800-829-6227 707-566-3831 info@micromat.com www.micromat.com

AcademicSuperstore.com campustech.com frys.com drbott.com bestbuy.com navarre.com macmall.com store.apple.com microcenterorder.com

©2009 Micromat, Inc. All rights reserved. TechTool is a registered trademark of Micromat, Inc. DiskStudio and Protege are trademarks of Micromat, Inc.



Macworld

VP, EDITORIAL DIRECTOR Jason Snell

EXECUTIVE EDITORS Philip Michaels, Dan Miller

MANAGING EDITOR Sue Voelkel

ART DIRECTOR Rob Schultz

SENIOR WEB PRODUCER Curt Poff

EDITOR AT LARGE Jim Dalrymple

LAB DIRECTOR James Galbraith

SENIOR EDITORS Christopher Breen, Peter Cohen, Jackie Dove, Dan Frakes, Rob Griffiths, Roman Loyola, Scholle Sawyer McFarland, Jonathan Seff, Kelly Turner

ASSISTANT MANAGING EDITOR Sally Zahner

ASSOCIATE EDITORS Heather Kelly, Dan Moren

ASSISTANT EDITOR Chris Holt

DESIGNER Carli Morgenstein

SENIOR CONTRIBUTORS Adam C. Engst, John Gruber, Jim Heid, Andy Ihnatko, Joe Kissell, Ted Landau, Rick LePage, Ben Long, Kirk McElhearn, John Moltz, John Siracusa, Derrick Story

CONTRIBUTING EDITOR Pamela Pfiffner

CONTRIBUTING LAB ANALYST Jerry Jung

CONTRIBUTING COPY EDITORS Claire Breen, Joshua Fruhlinger, Gail Nelson-Bonebrake, Charles Purdy, Alec Wagner

PRODUCTION CONSULTANT Jennifer Werner

CONTRIBUTING PHOTOGRAPHER Peter Belanger

DIRECTOR, WEB DESIGN Jason Brightman

SENIOR VIDEO PRODUCER Chris Manners

SENIOR DESIGNER, USER INTERFACE Johnathan Andersen

WEB DESIGNER Gene Kim

HOW TO CONTACT MACWORLD SUBSCRIPTION SERVICES

Access your subscription account online—24 hours a day, 7 days a week—at www.macworld.com/customer_service or http://service.macworld.com. You can use online subscription services to view your account status, change your address, pay your bill, renew your subscription, report a missing or damaged issue, get the answers to frequently asked questions, and much more.

To start subscribing, visit http://subscribe.macworld.com.

U.S. MAIL	Macworld Subscriptions Department P.O. Box 37781, Boone, IA 50037-0781 (If you are writing about an existing account, please include your name and address as they appear on your mailing label.)
E-MAIL	subhelp@macworld.com (Send your full name and the address at which you subscribe; do not send attachments.)
FAX	515/432-6994
PHONE	800/288-6848 from the United States and Canada; 515/243-3273 from all other locations

The one-year (12-issue) subscription rate is $34.97; the two-year rate, $59.97; and the three-year rate, $79.97. Foreign orders must be prepaid in U.S. funds; add $10 per year for postage to Canada or $25 per year for air freight to all other countries. Checks must be made payable in U.S. currency to *Macworld*. Please allow 3 to 6 weeks to receive your first issue or for changes to be made to an existing subscription.

MACWORLD EDITORIAL

The editors of *Macworld* welcome your tips, compliments, or complaints. Some stories and reviews from past issues can be located at www.macworld.com. We are unfortunately unable to look up stories from past issues; recommend products; or diagnose your Mac problems by phone, e-mail, or fax. You can contact Apple toll-free, at 800/538-9696, or visit the company's Web site, at www.apple.com. For editorial and advertising contact information, please turn the page.

April 2009, Volume 26, Issue 4

Macworld is a publication of Mac Publishing, L.L.C., and International Data Group, Inc. *Macworld* is an independent journal not affiliated with Apple, Inc. Copyright © 2009, Mac Publishing, L.L.C. All rights reserved. *Macworld*, the Macworld logo, *Macworld Lab*, the mouse-ratings logo, *MacCentral.com*, *PriceGrabber*, and *Mac Developer Journal* are registered trademarks of International Data Group, Inc., and used under license by Mac Publishing, L.L.C. *Apple*, the Apple logo, *Mac*, and *Macintosh* are registered trademarks of Apple, Inc. Printed in the United States of America.

IDG
INTERNATIONAL DATA GROUP

INTERNATIONAL DATA GROUP CHAIRMAN OF THE BOARD
Patrick J. McGovern

IDG COMMUNICATIONS, INC. CEO
Bob Carrigan

The easiest way to transfer ringtones to your iPhone just got better!

iToner 2

Drag in your tunes, crop them just so, then sync.
iToner's Cleartone™ technology filters and optimizes the audio so it sounds great on the iPhone's speaker.
Drag, crop, sync, and wow!

Download your free trial now: http://www.AmbrosiaSW.com/MacLife

AMBROSIA®
SOFTWARE INC

iToner 2 requires Mac OS X 10.4.10 or later. Ambrosia Software, Inc., and the Ambrosia Software logo are registered trademarks of Ambrosia Software, Inc. iPhone is a trademark of Apple Inc.

Mac Universal

©2009 by booq llc. All rights reserved. Booq and the b tab are registered trademarks of booq llc.

Macworld

PRESIDENT AND CEO
Mike Kisseberth

EXECUTIVE ASSISTANT
Caroline Ward

VP, STRATEGIC SALES, ONLINE
Mark Barreca (732/544-2006)

ASSOCIATE PUBLISHER, PRINT/MIDWEST ACCOUNT DIRECTOR
Kathy McKay (847/251-9274)

SALES ASSOCIATE
Shari Redan (508/370-0819)

EAST

EASTERN ACCOUNT DIRECTOR
Amy Singer (201/634-2317)

ACCOUNT EXECUTIVE, SALES DEVELOPMENT
Kathy Rebello (508/820-0440)

SALES ASSOCIATE
Jolene Westerling (508/370-0830)

WEST

SOUTHWEST ACCOUNT DIRECTOR
Cindy Hamilton (949/442-4005)

NORTHWEST ACCOUNT DIRECTOR
Alicia Langer (415/267-4578)

SALES ASSOCIATE
Billie Sutherland (949/442-4014)

NORTHWEST ACCOUNT DIRECTOR
Melissa Gruber (415/974-7373)

SR. ACCOUNT MANAGER, SALES DEVELOPMENT
Duane Hampson (415/978-3133)

SALES ASSOCIATE
Rocio Guerrero (415/978-3266)

NORTHWEST ACCOUNT DIRECTOR
Leslie Piper (415/243-3509)

ACCOUNT MANAGER, SALES DEVELOPMENT
Niki Stranz (415/243-3664)

ACCOUNT EXECUTIVE, SALES DEVELOPMENT
Carol Johnstone (415/978-3390)

ACCOUNT COORDINATOR
Paul Moretti (415/243-3575)

DIRECTOR, AD OPERATIONS
Kevin Barden (415/975-2673)

AD OPERATIONS TRAFFIC MANAGER
Nick Stanley (415/243-3628)

AD OPERATIONS PROJECT MANAGER
Leilani Lopez (415/978-3125)

AD OPERATIONS COORDINATORS
Keri Campbell (415/978-3317)
Andrew Galluccio (415/978-3259)

SENIOR MARKETING SPECIALIST
Michelle Kloss (415/978-3380)

DIRECTOR, PRINT AND ONLINE PRODUCTION
Nancy Jonathans

ASSISTANT PRODUCTION MANAGER
Eliza Wee

PREPRESS MANAGER
Tamara Gargus

BOOKING AND BILLING MANAGER
Ricardo Sandoval

CTO
Aaron Jones

DIRECTOR, APPLICATIONS DEVELOPMENT
Jim Hutson

SENIOR APPLICATIONS DEVELOPERS
Alexis Barrera, Bill Cappel, Justin Counts, Kieran Fitzpatrick, Wei Ming Xu

QA AND RELEASE ENGINEER
Ryan Eilders

EXECUTIVE VP/ GENERAL MANAGER, ONLINE
Stephan Scherzer

VP, BUSINESS DEVELOPMENT
Ulla McGee

VP, BUSINESS AND LEGAL AFFAIRS
Sue Krenek

DIRECTOR, ONLINE MARKETING
Alexa Wriggins

DIRECTOR, BUSINESS AND PROGRAM DEVELOPMENT
Brian Buizer

SENIOR PROGRAM MANAGER
David Lake

VP, STRATEGIC INTELLIGENCE
Jessica Lilie

SALES AND RESEARCH SPECIALIST
Angela Beaudin

PROCIRC SUBSCRIPTION MANAGEMENT
Shawne Burke Pecar, Susi Chapman, Megan Guard

PROCIRC RETAIL SOLUTIONS
Scott Hill, Mark Peterson

VP, HUMAN RESOURCES
Kate Coldwell

HUMAN RESOURCES REPRESENTATIVE
Ellen Cobb

CFO/COO
Vicki Peilen

DIRECTOR, FINANCE
Diane Ryczek

DIRECTOR, ACCOUNTING
Michelle Reyes

STAFF ACCOUNTANT
Scott Lum-Duenas

HOW TO CONTACT MACWORLD STAFF

Our offices are located at 501 Second Street, 6th Floor, San Francisco, CA 94107; phone, 415/243-0505; fax, 415/243-3545. *Macworld* staff can be reached by e-mail at *firstname_lastname*@macworld.com.

LETTERS TO THE EDITOR

Send comments about any aspect of *Macworld* to letters@macworld.com. Due to the high volume of mail we receive, we can't respond to each letter. We reserve the right to edit all submissions. Letters published in *Macworld* or on Macworld.com become the property of Mac Publishing.

BACK ISSUES OF MACWORLD

Starting with the March 2003 *Macworld*, back issues can be downloaded in digital format, from www.zinio.com ($6.99; Mac OS X 10.1 or later required). Print-format back issues (subject to availability) cost $8 per issue for U.S. delivery, and $12 for international delivery; prepayment in U.S. currency to *Macworld* is required. Send a check or money order to *Macworld* Back Issues, P.O. Box 37781, Boone, IA 50037-0781; or phone 800/288-6848 (U.S. and Canada) or 515/243-3273 (all other locations).

REPRINTS AND PERMISSIONS

You must have permission before reproducing any material from *Macworld*. Write to *Macworld*, Reprints and Permissions, 501 Second Street, 6th Floor, San Francisco, CA 94107; include a phone number. To order reprints of your company's editorial coverage, call Reprint Management Services at 717/399-1900; fax 717/399-8900; or e-mail macworld@reprintbuyer.com.

MAILING LISTS

We periodically make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write to us at *Macworld*, P.O. Box 37781, Boone, IA 50037-0781, or e-mail us at subhelp@macworld.com. Please include a copy of your mailing label or your full name and address.

MACWORLD CONFERENCE & EXPO

As the flagship sponsor of Macworld Conference & Expo, *Macworld* encourages all subscribers to attend this exciting annual industry event. For information, please visit www.macworldexpo.com.

BPA INTERNATIONAL

"If you own an iPhone, this is the backup battery to buy!"

— TUAW.com

In just minutes a day, plug in and top off your iPhone quickly!

by Richard Thalheimer

Just plug RichardSolo 1800 into your iPhone once or twice a day, for fifteen minutes, and keep your iPhone charged up. At your desk, or at dinner, plug RichardSolo into iPhone to instantly transfer charge. No more battery worries. RichardSolo will charge iPhone to full 1.5 times, and lithium-ion is good for 3-5 years of recharges.

110-240v AC wall charger and dual-port USB car charger included free. Use the iPhone while charging it, and charge the RichardSolo 1800 and iPhone together at the same time — like getting two extra chargers for free! When you travel, you only need to take one charger, and wake up in the morning with the RichardSolo and the iPhone charged. Put the RichardSolo in your pocket, plug it into iPhone now and then to top it off.

Enjoy the built-in laser pointer, and ultra-bright LED flashlight. And, this is the only snap-on battery available with a latching mechanism for iPhone, to keep the battery firmly attached. 1800 mAh lithium-ion battery is largest in its class and holds its charge for months. RS001 certified for iPhone 2G/3G, and all iPod models except shuffle.

Your satisfaction is guaranteed, with our 30 day, no-hassle return privilege. If you're not satisfied for any reason, we email you a pre-paid return label. You have no risk whatsoever!

Order now for next day USA and Canada shipping:

RS001 for iPhone/iPod **$69.95**

Order two, and save 15%

d is a trademark of Apple Inc., registered in the U.S. and other countries. iPhone is a trademark of Apple Inc.

We are here to support you!
Actual customer comments:

To have your company exhibit such exceptional service is unbelievably refreshing. ***— P.S.***

Dear Richard and Team: This is what I call great customer support. I wish more companies would figure this out these days. Thank you so much. ***— D.C.***

You have provided me one of the best services I have ever encountered on any on-line/telephone shopping. ***— T.K.***

Richard, thank you. That was the fastest response I have ever received. Great product by the way. Appreciate the assistance. ***— M.W.***

This is absolutely the best customer service experience I have had in a long time. ***— L.L.***

I've read online about RichardSolo's amazing customer service, and I must say that I'm now a true believer. ***— B.L.***

Reviewers give it top marks.

"A must-have accessory for any iPhone Mobile Warrior." ***— MobilityToday.com***

"Your product is excellent, and the customer service is, of course, outstanding." ***— Chris.Pirillo.com***

"The quintessential accessory for all iPhone/iPod owners. If you don't already own one, you need to order yours today." ***— BuyMeAniPhone.com***

"Now RichardSolo has released a much improved version of the Backup Battery that not only provides more power for your iPhone or iPod, but some excellent new features that trash the competition." ***— TUAW.com***

Included Free:

- *AC Wall Charger*
- *Dual USB Car Charger*
- *Retractable USB Cable*

Buy Me An iPhone.com
BEST of '08
iPhone Backup Battery

Made for iPod

Works with iPhone

Built-in super bright LED flashlight.

Built-in laser pointer.

Richard|Solo®

On-line ordering and blog reviews

www.RichardSolo.com

email: support@RichardSolo.com

Key code# MWM

Blast from the Past

Taking a trip down Mac memory lane, and scrutinizing the latest MacBooks

Memory Lane

I couldn't agree more with John Gruber's "3 Things OS X Could Learn from the Classic Mac OS" ("The Mac at 25," January 2009), especially his comment on WindowShade. I still occasionally use OS 9, and there is a certain visceral pleasure in reaching into the screen and collapsing a window to see what's under it.

Timothy Arends

I was happily surprised that your experts chose the Mac SE/30 as the best Mac ever. I agree. The SE/30 used very little desk space and had snappy performance. It also lasted forever in computer terms—I bought two of them in 1990 and ran them full time at work for 12 years without a breakdown. They are now displayed in my computer museum at home, where they still function perfectly.

Ken Cohen

It was disappointing to read Andy Ihnatko's statement regarding his best Mac ever. Ihnatko, in a roundabout way, admitted to stealing his first Mac by sabotaging it until his employer reduced the price to one he could afford. It is behavior like his that makes it necessary for retailers to charge higher prices.

Sam Taylor

I couldn't help but smile when I saw the cover of *Macworld* with the original Mac on the cover. I had that first Mac, and before that the Apple Lisa. When it was delivered to my office, I turned it on, and within five minutes it was going full speed. And the software was as elegant and intuitive for that era as the software is today. As I look forward, I'm thankful for the milestones that helped me get here.

Cynthia Black

Poor Reception

Of all my laptops, the ones from Apple have the worst wireless reception ("Beyond AirPort," January 2009). I'm using the latest generation of both the MacBook and MacBook Pro, and my older Dell laptops have much greater reception and range to the same wireless base. I'll be getting a new Lenovo X301 soon, which I also expect to beat the Macs in how far I can roam while retaining wireless connectivity to my network.

akira34

Defending the Puck

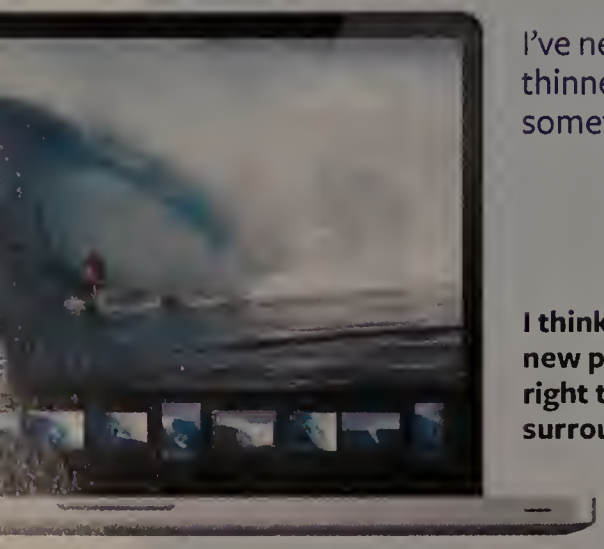
Most people were never taught how to use the USB hockey-puck mouse properly ("6 Worst Apple Products of All Time," January 2009). If you place the palm of the hand directly over the mouse and use the fleshy part of the middle between the palm and the knuckle to click, the wrist is able to draw in a freehand fashion without restriction. Other mice do restrict the wrist, keeping it somewhat tense. It's the *only* mouse that allows me eight to ten hours of nearly continuous use without aches and pains.

John Willis

New MacBook Screens

I was poised to buy my first MacBook with the new aluminum unibody,

OVERHEARD ON THE FORUMS



I've never once thought, "I wish this laptop was thinner." Smaller and lighter—now there's something most laptop users can appreciate.

nom
macworld.com/4342

I think during the next quarter, Apple will roll out new products, and will show us all that it was right to leave Expo, even if I will miss the hype surrounding the keynotes.

MrLarrity
macworld.com/4341

PHOTOGRAPH BY PETER BELANGER

Without a ScanSnap scanner, this office would be a mess right now.

ScanSnap S1500M

Meet the new ScanSnap S1500M. Faster and more advanced than ever.

ScanSnap just got smarter. It knows when a document should be scanned in color, grayscale or black and white. It knows if it should increase the resolution on small documents for readability. It has intelligent paper feed detection so you can rest assured that all the pages in the automatic document feeder will be scanned the way you want. And ScanSnap scans at a blazing 20 pages per minute–directly to an application or to secure, searchable PDFs for filing or emailing. All at the touch of a button. Managing paperwork is now a no-brainer.

Mac Universal

Tell us how you'll ScanSnap. You just might win an American Express gift check. Visit http://us.fujitsu.com/scanners/macworld for more details.

FUJITSU

THE POSSIBILITIES ARE INFINITE

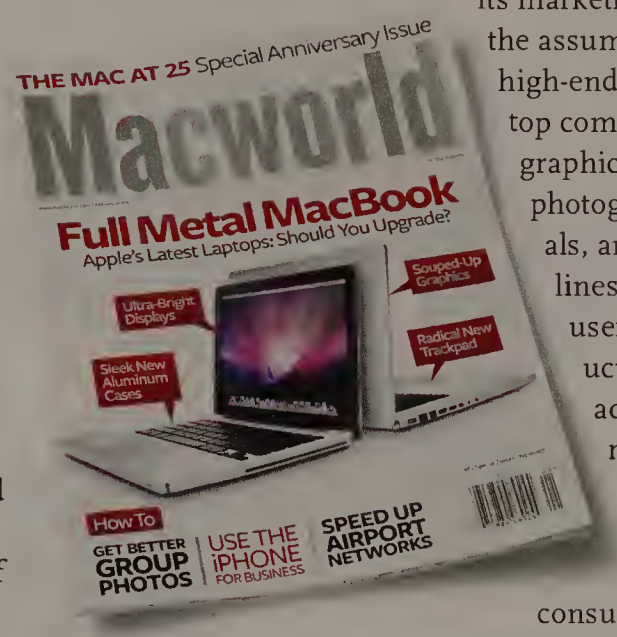
© 2009 Fujitsu Computer Products of America, Inc. All rights reserved. Fujitsu and the Fujitsu logo are registered trademarks of Fujitsu Ltd. All other trademarks are the property of their respective owners

Multi-Touch trackpad, and LED backlighting ("MacBook Makeover," *Reviews*, January 2009). But Apple's blinkered marketing of the mandatory glossy screen and omission of FireWire has changed my mind. It's a complete disappointment and not worth the four mice you awarded it.

Ian Angel

I used to have a laptop with a glossy screen, and the brightness of the screen does not "mitigate glare and reflectivity" as your review of the new MacBook claims. As a visual-effects artist, I need to be able to make out all the details of the imagery I'm working with. And when you're on a laptop, you don't always have control over your environment—which could be a coffee shop or restaurant. So adjusting the angle and position of your computer doesn't always help with reflections and glare, especially with a glossy screen.

Todd Groves



I need to replace a three-year-old Mac PowerBook and learned in your recent review that the only choice I have is a glossy screen. Apple must be basing its marketing strategy on the assumption that high-end Mac Pro desktop computers are for graphic design and photography professionals, and that its other lines are for home users. Apple products used to be adaptable to the needs of many users and were not marketed using the consumer/prosumer paradigm that many other product manufacturers have adopted. Now Apple seems to be playing games rather than sticking to that philosophy. Give us greater choice in the kind of Mac product we can build so it serves all our needs.

Phil Smith

I have read too many bad reviews about the new laptops' glossy screen. Enough. It's gorgeous. There is no comparison between my 14-inch iBook's screen and my new MacBook Pro's screen. My digital photos look ten times more stunning and sharp. The naysayers know not of what they speak.

Dan Zulli

Open Windows

There's a free alternative to Parallels and VMware, called VirtualBox. Now under Sun's wing, it is stable and easy to use. It does lack a few features that the commercial offerings have, but it offers snapshots, as well as mouse and display drivers for Windows and Linux. I can test Web sites in various browsers, update my BlackBerry's software in Windows XP Pro, and have a full Ubuntu installation. Best of all, everything runs as fast as it does in Parallels and VMWare, even though it uses only one core of my Core 2 Duo.

Peter Jaques

Half an Apple

Maybe Apple should consider selling off the computer portion of its business to a company dedicated to making computer software better and more stable. Then it could concentrate on iPhones and iPods, which seem to be all Apple is making if you believe the amount of news these products generate.

Gary Moliver

Loud and Clear

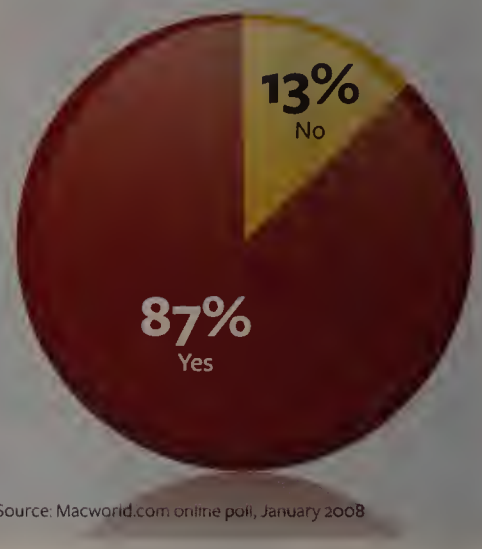
One-eared Mac and Apple diehards like me, who need a cell phone that works with a hearing aid's analog, electromagnetic tele-coil pickup, can forget about the iPhone—at least until it gets some serious reengineering. It does not emit the electromagnetic analog vibes that hearing aids are designed to pick up and amplify without also amplifying ambient noise from the external mic. To be fair, neither do any of the few other nonflip cell phones I've tried.

Terry Mahoney

PHOTOGRAPH BY PETER BELANGER

READER POLL

Without Apple, should there be a Macworld Expo next year?



Source: Macworld.com online poll, January 2008

Correction

In "The 24th Annual Editors' Choice Awards" (February 2009), we called Hulu's 480p video resolution "high definition" when it is in fact only enhanced definition. High-definition resolution starts at 720 pixels.

Contact Us

Post comments on our forums (💬) at forums.macworld.com or send them by e-mail (✉) to letters@macworld.com. Due to the high volume of comments we receive, we can't respond personally to each one. We reserve the right to edit all e-mail letters and forum comments. All published letters and forum comments become the property of *Macworld*.

Goes with Anything. Anywhere.

BLUE ONYX

RUBY RED

PEARL WHITE

- *Shown at Actual Size*
- *Less than ¾" Thick*
- *Store Up to 500GB*

MiniStation™ Cobalt

Portable USB 2.0 Hard Drive

The **New MiniStation Cobalt** from **Buffalo** is a stylish and affordable, portable storage solution. Only slightly bigger than your iPhone™ and with way more storage capacity, the MiniStation Cobalt lets you store a ton of music, movies and media files to take with you anywhere. And with 3 colors to choose from, you can match your MiniStation to your mood, or your sneakers.

BUFFALO™

www.buffalotech.com

© Buffalo Inc. 2009, Buffalo Technology. BUFFALO logo and MiniStation product logos are either trademarks or registered trademarks of Melco Holdings Inc. or Buffalo Inc. iPhone is a trademark of Apple Inc., registered in the U.S. and other countries. The names and logos of other companies mentioned herein belong to their respective owners.

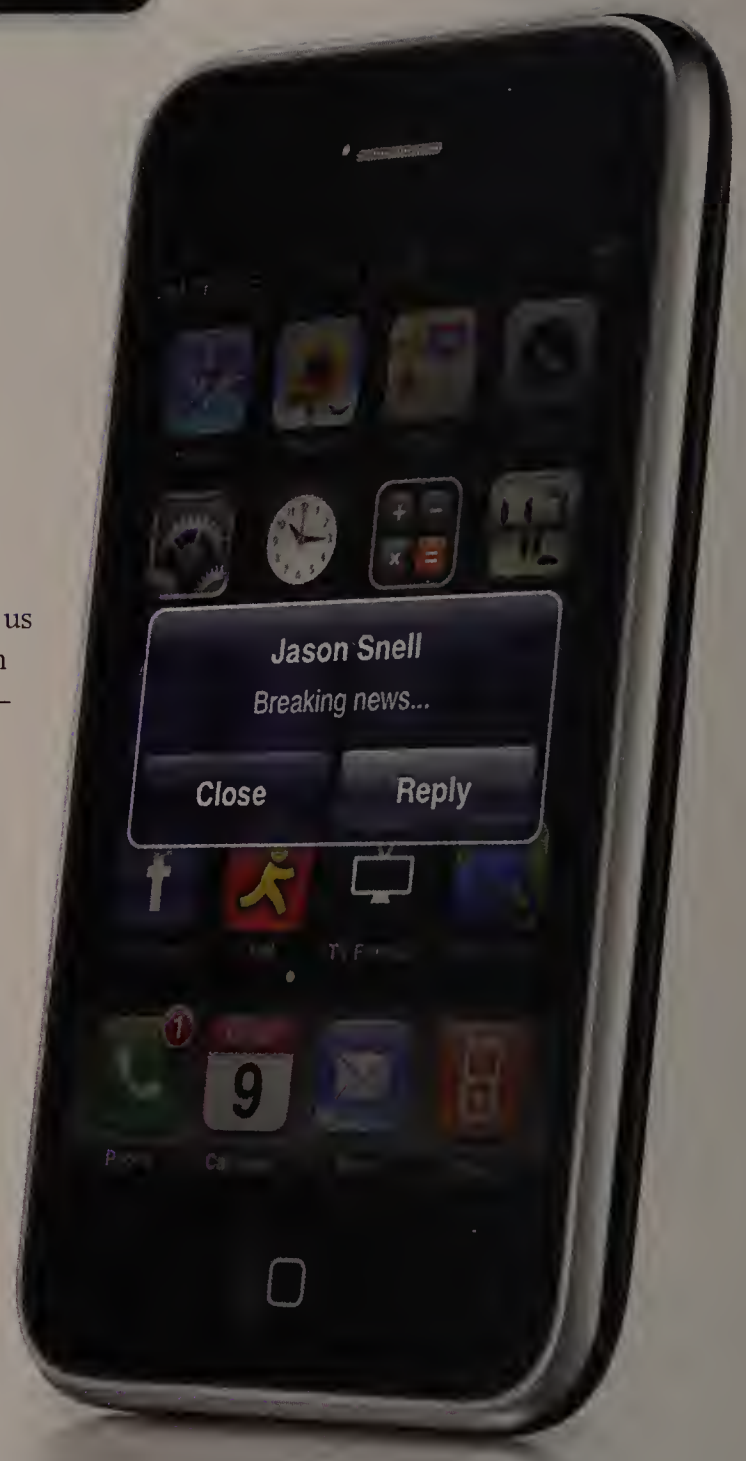
MacUser

iPHONE

MIA: Push Notification

Is it dead and buried, or waiting in the wings?

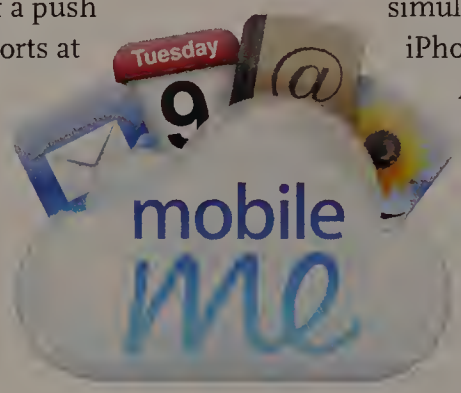
BY DAN MOREN



Apple is no stranger to a missed deadline or two, nor is the company averse to pushing back a product's launch a few weeks or months when it needs more time. But a less common occurrence is the product that disappears entirely into the black hole of 1 Infinite Loop.

That's apparently what happened to the push notification system for the iPhone that Apple touted at 2008's Worldwide Developers Conference. The system was meant to quell complaints over the fact that the iPhone operating system doesn't allow for multitasking: with the exception of a few of Apple's own programs, apps can't run in the background as they do in most desktop operating systems. Apple would deliver the push notification system in September 2008, promised Senior Vice President of iPhone Software Scott Forstall. Apple didn't.

At the time this issue went to press, there was still no sign of a push notification feature. Reports at the end of September said that Apple had pulled all support for the system from beta versions of the iPhone Software Development Kit for the then-forthcoming iPhone 2.1 update. So what happened?



The company's approach appears to be to pretend that it never announced the system in the first place—you won't find any notice of it on Apple's site, save for the plaintive cries of users wondering what happened to it (Apple did not respond to a request for comment).

Apple's silence doesn't stop us from spinning theories—from the paranoid to the plausible—about its disappearance, however: Is it buried with Jimmy Hoffa? Did Steve Jobs wipe all traces of the notification system from history? (Well, that's ridiculous—I mean, if that were the case, we wouldn't be talking about it now, right?)

Of course, there are some more reasonable possibilities for Apple's behavior.

Its Reach Is Greater Than Its Grasp

Last summer, Apple's plate was fuller than that of the average customer at the Old Country Buffet: the company tried to simultaneously roll out the iPhone 3G, the brand-new App Store, and an overhauled version of its Internet service, MobileMe. Unsurprisingly, as with the typical buffet customer, Apple's eyes were bigger than its stomach, and there were enough problems with the MobileMe rollout to prompt Apple to extend MobileMe users' subscriptions.

No less than Steve Jobs himself was said to be, um, disappointed with MobileMe's launch, a sentiment he expressed in an e-mail to Apple employees in which he said that the service was "not up to Apple's standards."

It seems plausible that, having learned from that experience, Apple wasn't sufficiently confident about launching yet another online service, especially one that might have been more complex than the company first anticipated. One developer I talked to opined that Apple might not have thought the whole idea through, given the issues of scale that the system might encounter in the real world.

It's Not Good Enough

As much as push notification was said to be the solution to the iPhone's lack of multitasking, the problems that it solves are actually rather limited. Developers

PHOTOGRAPH BY PETER BELANGER

had three options for implementing notifications: they could place a badge on their app's icon (as with Apple's Mail, Text, and Phone apps); cause the application to play a sound (again, as with the Mail, Text, and Phone apps); or pop up a dialog box, like the one you get when you receive a text message (a user could either click on the dialog box to open the app or dismiss the box).

While such a solution might be useful for several types of applications—instant messaging, news reading, social networking, calendaring, and VoIP, to name a few—there are also plenty of apps for which notifications are useless. Take music applications: while the iPhone's iPod app can continue to play music when it's not running in the foreground, third-party audio apps such as Internet radio programs can't. Instant messaging apps, on the other hand, might benefit from notifications; but even so, those programs would probably be better served by the ability to run in the background.

So a second possible explanation is that Apple decided to ax push notification because it didn't do enough. As a company, Apple has rarely hesitated to say no to things that aren't up to snuff, even when it's a product that's close to shipping—an unusual quality in the corporate world. But if this explanation is correct, don't be surprised to find out that Apple is working on a different—and better—solution.

It's All Too Much

OK, this third theory is not so much new as it is an amalgam of the previous two. Apple supposedly developed the notification system because it taxed the iPhone's resources less than multitasking would, and because it was easier to manage (you don't need to figure out which processes are hogging the device's memory, for example).

But, according to this scenario, what Apple didn't necessarily take into account was the user. Right now, you probably get text messages popping up dialog boxes when you're browsing the Web or checking your e-mail, but imagine if every app on the iPhone had the ability to interrupt you. Sure, you'd probably be able to turn the notifications on and off for individual apps, but all it takes is one irresponsible program, and you're inundated with dialog boxes and literal bells and whistles.

Apple prizes simplicity and elegance, so maybe the company realized that the notification system might cause more problems than it would solve.

Notifications? What Notifications?

And then of course, there's this possibility: no one really cares about this feature. To paraphrase the late author Douglas Adams, despite the noise Apple's rather public self-imposed deadline made as it whooshed by, it's not as though the Internet has been overrun with people demanding their push notifications. Sure, you'll find comments on Apple's discussion boards and the iTunes Store, and you might even see the occasional irate blog post, but it's not as though people are up in arms or—more to the point—are choosing not to buy iPhones because Apple hasn't delivered this feature.

Apple's approach to push notification appears to be to pretend that it never announced the system in the first place.

Maybe that's the simple answer: that users just don't care. They've learned to adapt to the iPhone's way of doing things, and that way doesn't include notifications or multitasking . . . at the moment, anyway. It's likely that at some point in the future Apple will introduce a feature that handles the issues notification would have addressed—and most users seem content to wait until then.

Hey, maybe it will even come with copy-and-paste functionality.

Dan Moren is a *Macworld* associate editor.

iPHONE

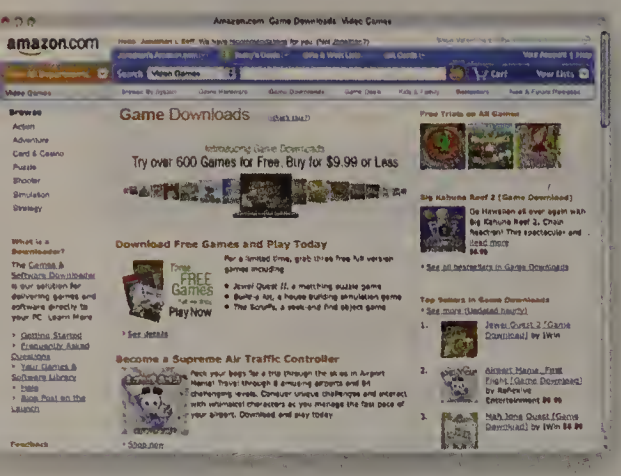
An iPhone without a Data Plan?

Recently, Sanford Bernstein analyst Toni Sacconaghi opined on how Apple could increase its smart-phone market share—by selling an iPhone without a data plan. Sacconaghi proposed two ideas: an iPhone nano that plays music and videos but can't access the Net or run iPhone applications, and an iPhone touch that's basically an iPod touch with a cell radio in it (for voice only).

Huh? Take one of the iPhone's most convenient and attractive features—the ability to access the Internet no matter where you are—and just toss it out the window? Ask your average iPhone user if he or she spends more time talking on the phone or using it to surf the Web, and you might get the reply, "It makes phone calls, too?"

More to the point, though, Sacconaghi argues that it's all about converting the 100 million iPod users into iPhone users. However, those people are already Apple customers. And since Apple no longer gets a cut of iPhone users' monthly payments to AT&T, it doesn't stand to gain anything.

Apple is in the business of converting conventional cell phone users into iPhone users. And that's for one simple reason: because Apple knows smart phones are the future. I'll admit that the data plan is a sticking point for many who would otherwise like to have an iPhone. But that barrier isn't Apple's problem so much as it's the cell phone carriers' problem. They clearly stand to gain more than Apple does: they want people to pay more by adding data packages.—**DAN MOREN**



GAMES

Amazon Game Download Service Shuts Out Mac Users

Amazon.com has quietly launched its new Game Downloads Web site (macworld.com/4403), where users can purchase and download more than 600 casual video games priced at $10 or less. For the moment, though, Mac users are excluded from the fun.

The Game Downloads site is described as a beta version. As such, it is "a project or process that is being tested," according to Amazon, which said that it will be testing different features and gathering input from users about how to develop the new service.

Unlike Amazon.com's MP3 files, which eschew any sort of digital rights management technology, the games require activation through the use of a product key. A Windows-based Amazon Games & Software Downloader is also required to download and install the software; the downloader is compatible with Windows XP and Vista.

In an FAQ posted on the Amazon.com Web site, the company indicates that it is "developing a version of the Amazon Games & Software Downloader that will be compatible with Mac OS," although it gives no time frame.—**PETER COHEN**

iPHONE

Flash on iPhone Is a 'Hard Technical Challenge'

After cut-and-paste, perhaps no feature missing from the iPhone ranks higher on the collective wish list than support for Adobe's Flash. The iPhone's Mobile Safari browser may give you the "real Web," but it doesn't let you view the many, many Flash-based Web sites on the Internet.

Adobe has acknowledged working on an iPhone version in the past, but in a recent interview with Bloomberg News at the Davos World Economic Forum in Switzerland, Adobe CEO Shantanu Narayen said: "It's a hard technical challenge, and that's part of the reason Apple and Adobe are collaborating," adding, "The ball is in our court. The onus is on us to deliver."

You may recall that Steve Jobs made the case a year ago that Adobe's mobile version of Flash wasn't good enough for the iPhone. Since then, some people have speculated that Apple may be looking at a rival technology, SproutCore, to fulfill its Flash needs.

Until then, iPhone users will have to suffer with the unbearable lightness of a Flash-less Web.—**CYRUS FARIVAR**

BUSINESS

Apple Is among the Most Popular Brands

We know that Apple and its products are front and center in many people's minds these days, but how do Apple's products compare with other brands? A company named Vitrue set out to gauge the impact of certain brands in the realm of social networking—that is, how much they've permeated social media such as Facebook, Twitter, Flickr, and the like. And Apple figures prominently in Vitrue's list of the top 100 most talked-about brands in the social arena for 2008, according to the company's Social Media Index (macworld.com/4404).

If you spend any time at all on social sites, the results won't exactly bowl you over. Apple and its products secured several prominent spots on the list, with the iPhone topping the whole list. Apple itself followed closely behind in the number three spot, just behind CNN. The iPod appears down in seventh place, after Disney, the Xbox, and Starbucks; and the Mac comes in a respectable 16th, even though it ranked behind Dell and Microsoft.

The list is the result of Vitrue's daily analysis of more than 2,000 popular brands. The company analyzed the online conversations on a variety of social networking, blogging, microblogging, and photo- and video-sharing sites, and then used a series of algorithms to come up with a numeric score for each brand.

Of course, such rankings create a virtuous (or vicious) cycle: now people will be talking about those brands even more, enhancing their chances of staying on the list.—**DAN MOREN**

PRODUCT WATCH

HARDWARE

Coolpix P90, from Nikon (www.nikonusa.com): 12.1-megapixel camera features 24x optical zoom along with 15-frame-per-second shooting capability ($400).

d2 Blu-ray Professional BD-R, BD-RE Drive, from LaCie (www.lacie.com): 8x Blu-ray Disc burner features USB 2.0 and FireWire 400 interfaces ($450).

iCon 431, from nova media (www.novamedia.de): 3G USB modem is compatible with HSUPA, 3G, UTS, EDGE, and GPRS networks (€168).

Lumix TS1, from Panasonic (www.panasonic.com): 12.1-megapixel camera is waterproof, shockproof, and dustproof; records AVCHD Lite HD video ($400).

iPod + iTunes News

Everything you need to know about digital music

Elton John iPods Benefit Charity

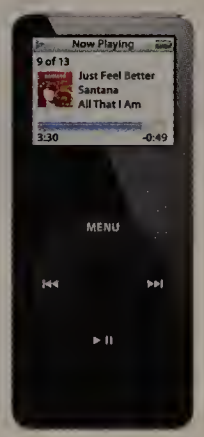
Here are the eight words I'm sure you've been dying to read: Swarovski crystal–encrusted Elton John–signed iPod nanos. If you're worried that your iPod is falling short in the bling department, maybe you should consider a trade-up that not only benefits you, but helps others as well.

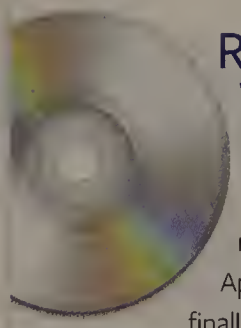
Buy a bejeweled nano from Goldgenie (goldgenie.com)—whose founder Laban Roomes helped design the iPod—and at least 12.5 percent of the cost goes to the Elton John AIDS Foundation (www.ejaf.com), which helps people around the world who are dealing with the disease. As you might expect, the players are pricier than the usual iPod nano: the 8GB goes for £400 (about $565) and the 16GB model runs £450 (about $636). But hey: crystals. And a laser-engraved Elton John signature. How can you afford *not* to buy one?—**DAN MOREN**

Settlement Reached over Scratched 1G iPod Nanos

In 2005, Apple introduced the iPod nano. Unfortunately, some unlucky consumers who jumped headfirst into the pool of first-generation Apple products found themselves the owners of iPod nanos that were rather easy—OK, let's say *very* easy—to scratch and otherwise damage. Turns out that some of those nanos escaped the factory without the protective coating that should have been on the front.

Also unfortunately, those customers were forced to resort to legal action to get their problem addressed. And now a settlement has been reached, with Apple writing checks to the tune of $15 (if Apple sent you a free slip case as a result of your complaints) or $25 (if you didn't get a case). To find out whether you're eligible, enter your serial number on the Claim Form Request Web site (macworld.com/4405).—**DAN MOREN**





RECORD LABELS STILL WARY OF APPLE'S WRATH

The head-butting between Steve Jobs and the recording industry seemed to be over when Apple announced that the record labels would finally give up digital rights management, while Apple would allow them the flexible pricing they so desired.

But according to a music industry executive who spoke to the *New York Times,* the situation is still as tense as ever, with Apple's dominant presence in the music market giving it a disproportionate amount of leverage over the labels.

A number of high-level music execs, speaking anonymously, have claimed that they've operated in fear of Apple's removing a label's songs from the iTunes store in the event of a dispute. At least for now, the major labels have good reason to fear Apple.—**DAVID DAHLQUIST**

iPHONE

Google Adds Over-the-Air Calendar, Contact Sync for iPhone

Syncing your contacts and calendars to the iPhone—and, more important, *keeping* them in sync—is easy enough if you're using MobileMe or you have a Microsoft Exchange account, both of which keep your contacts and calendars up-to-date through the magic of wireless syncing. Meanwhile, iPhone users who rely on online services such as Yahoo and Google have suffered second-class status, forced into the inequity of having to actually plug their iPhones into their computers.

But if you're a Google user, those days are coming to a close. Happily, Google has announced that it will now be offering over-the-air synchronization of Google contacts and calendars with the iPhone, the iPod touch, Windows Mobile–based phones, and SyncML-compatible devices. The secret sauce that makes it all so delicious? As it turns out, it's Microsoft's ActiveSync technology, the same foundation that enables Exchange's own synchronization features.

It's a step in the right direction, and one that may even get a few MobileMe users thinking about jumping ship.

—**DAN MOREN**

Google™

PRODUCT WATCH

HARDWARE

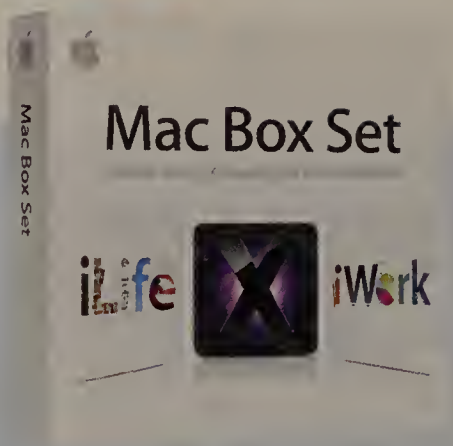
Pixma MX860, from Canon (www.usa.canon.com): All-in-one printer features Wi-Fi wireless printing and comes with five individual ink tanks ($200).

Xacti VPC-FH1, from Sanyo (www.us.sanyo.com): AVCHD camcorder can record 1080p video at 60 frames per second ($500).

SOFTWARE

Captain FTP 6, from Xnet Communications (www.captainftp.com): Updated FTP software adds sync scheduling using Time Machine ($29; upgrade, $19).

Cubase 5, from Steinberg (www.steinberg.net): New version of digital audio workstation features an integrated vocal-pitch-correction section and new beat-creation tools, among other additions ($500).



SOFTWARE

What's behind the Mac Box Set?

In January, Apple announced the Mac Box Set, a $169 bundle comprising OS X 10.5 (Leopard), iLife '09, and iWork '09 for $169. That's roughly a 40 percent discount over buying the three individually. (Apple also offers a $229 Family Pack, good for five Macs.)

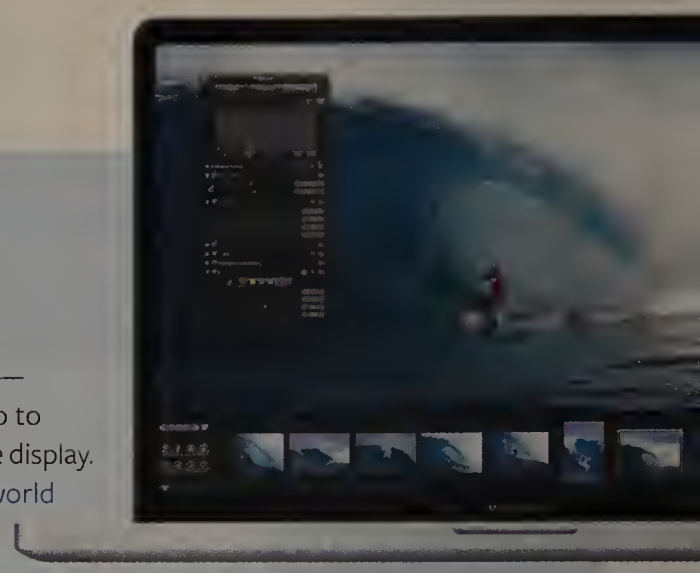
Needless to say, that's a great deal, and it ought to be pretty tempting for anyone who has yet to upgrade to Leopard. So what's the strategy behind the Box Set? First and foremost, of course, is the fact that iLife '09 is incompatible with all versions of Mac OS X prior to Leopard. Obviously, the box set is primarily a way of sweetening the deal for users who have been adamantly sticking to Tiger—or even earlier OS X versions—and enticing them to upgrade to the latest and greatest of everything.

Then there's the fact that Windows Vista includes photo-managing, movie-editing, and DVD-authoring applications (no matter how lackluster they may be). The Box Set gives users everything they need in one package for a price that's much lower than even Vista's cheapest version. The Mac Box Set can also help increase the adoption rate of the iWork suite. Pretty smart move, Apple.—**AAYUSH ARYA**

LAPTOPS

Making a 'MatteBook' Pro

My feelings on glossy displays are clear—I despise them. So I sent a MacBook Pro to TechRestore to spruce it up with a matte display. You can read about the results at macworld.com/4406.—**ROB GRIFFITHS**



SOFTWARE

Google Earth Dives Beneath the Waves, Soars into Space

Google Earth lets you explore the blue planet from your desktop through maps, satellite imagery, and more. And now you can peer under the whitecaps to explore the ocean floor, and travel to Mars as well. The beta of Google Earth 5 (earth.google.com), the latest version of the company's free software for Macs, Windows PCs, and Linux computers, features 3-D bathymetry. This capability lets you view 3-D underwater terrain—previously, Google Earth sported only a 2-D relief map of major ocean features. The app also adds environmental information about the ocean, including fishing and whale migration paths.

Google Earth's reach now extends to the red planet too. You can view Mars maps (using the same controls) via satellite imagery, along with 3-D terrain, high-res images, and a view of tracks and locations visited by the Mars landers.—**PETER COHEN**

Tech Trends

The Increasingly Untethered Workforce

A growing portion of North American companies are going wireless, according to a new Gartner study. It finds that the number of workers equipped exclusively with mobile phones will surpass those with only desk phones in 2011. And by 2012, nearly one-quarter of workers will be mobile only.—MARYANN JONES THOMPSON

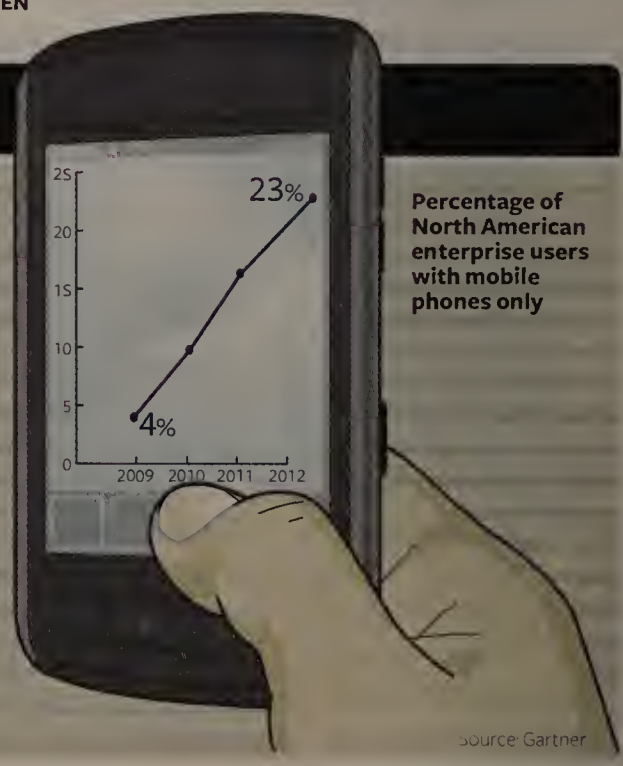


ILLUSTRATION BY CHRIS PHILPOT

PRODUCT WATCH

SOFTWARE

Fontcase, from Bohemian Coding (www.bohemiancoding.com): Font-management utility uses an iTunes-like interface for managing and sharing fonts ($46).

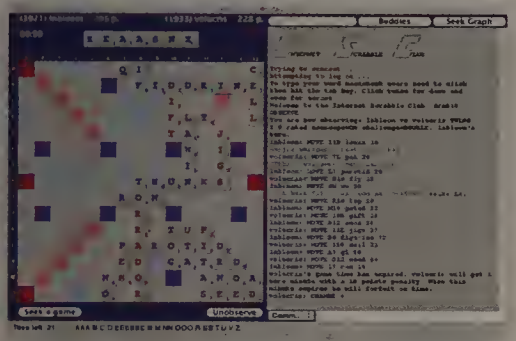
Mellel 2.6, from RedleX (www.mellel.com): Updated word processor adds Quick Look support for Leopard and a new Spread View for looking at facing pages together ($49; upgrade, free for two years).

SnappIr, from Briksoftware (www.briksoftware.com): Screenshot utility uploads screenshots to a Web site to aid in online sharing (€20).

SugarSync 1.5, from Sharpcast (www.sugarsync.com): Updated online file syncing, data storage, and file-sharing service adds shared folders (pricing starts at $2.49 a month).

Hot Stuff

What we're raving about this month



Internet Scrabble Club

As a Scrabble fan, I've tried online versions of the classic game, including the official Scrabble app on Facebook. The best version I've found is the Internet Scrabble Club. Download the Java app, log in to the ISC server, and you can find a game almost anytime, featuring players of all skill levels (several real-world Scrabble champs play there). The only downside I've discovered: the Mac client doesn't have all the features of the Windows client; for example, you can't sign the Fair Play pledge (whereby you promise not to use anagram software). And I don't know how Hasbro or Mattel (which both own the rights to Scrabble) feel about the ISC's use of their trademark. But if you have a Scrabble addiction, the ISC is a fiendishly good place to get your fix (www.isc.ro).—**DAN MILLER**

Berkeley Lamp II

If you spend your days at a desk, good lighting can make a huge difference. Full Spectrum Solutions' $289 Berkeley Lamp II is the first lamp I've tried that bathes my desk *and* office in bright, pleasant light without creating any eyestrain or glare. The Lamp II provides two independent, dimmable bulbs—one facing downward for task lighting and an upward-shining one for the room. Each bulb has a choice of color temperatures: 3,500K (for casual lighting) or 5,500K (for reading and other tasks). An AC outlet on the lamp's base lets you power up a gadget. The Berkeley Lamp is environmentally friendly too: the fluorescent bulbs should last ten times longer than incandescents, and it comes packed in 100 percent postconsumer materials (www.berkeleylamp.com).—**DAN FRAKES**

Back-In-Time

Leopard's Time Machine is great for creating backups, but its interface is limiting. Tri-Edre's $29 Back-In-Time offers a more flexible way to access those backups, even on multiple Time Machine disks. It allows you to see how many different versions of a file or folder exist, identify all files new to the current backup or deleted since the previous backup, restore data to any location, and edit Time Machine's backup schedule. (www.tri-edre.com).—**DAN FRAKES**

Ocean Way Drums

Imagine having two great audio engineers sitting next to you when you load up your virtual drum kit. That's exactly what you've got if you use Ocean Way Drums, a new music tool from Grammy-winning producer Allen Sides and Grammy-nominated producer Steven Miller. Miller and Sides created the drum samples at Ocean Way Studios, one of the most famous studios in the world. They recorded in Studio B, where the drum tracks for some of the world's top-selling albums were laid down. Ocean Way Drums starts at $249 (www.oceanwaydrums.net).—**JIM DALRYMPLE**

Tune Blocker

Technology, at its best, saves us from doing stupid things. If you've ever connected your iPod or iPhone to someone else's Mac to charge it and accidentally told the device to sync with that person's library, you know where I'm coming from. Enter Matias's Tune Blocker, which offers a way to charge your iPod on any computer without fear. The Tune Blocker is a USB-to-iPod dock-connector cable with a special switch. In one position, it'll act like any iPod cable, syncing all your data, but flip the switch on the Tune Blocker to the charge-only setting, and you'll disable the syncing functionality. No accidental syncing, no potential iTunes-erasing, and no one else's music harshing your buzz. A 3-foot cable runs $25 and a 6-foot version goes for $30 (www.matias.ca/tuneblocker).—**SCOTT MCNULTY**

Everything you need for

Limited Time Offer: Get 50% off and more for the first 6 months when you sign up for a 1 year plan! Visit www.1and1.com for details!

MEMBER OF united internet

1-877-GO-1AND1

a successful website

DOMAIN NAMES

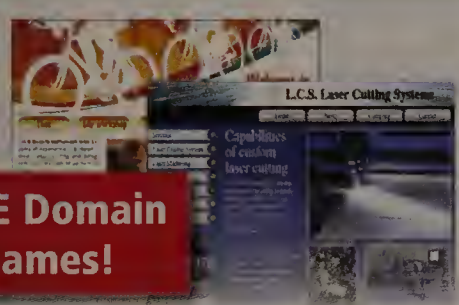
.biz

Register your business website and save! Protect your personal information – private domain registration is included for FREE!

.biz domains ~~$8.99~~/year
now $3.99/first year*

Now 50% off

WEB HOSTING



FREE Domain Names!

The 1&1 Business Package gives you everything you need for a professional website. 3 domains, site-building tool, 2,500 e-mail accounts, search advertising vouchers and more!

Starting at ~~$9.99~~/month
now $4.99/mo.* (first 6 months)

50% OFF

PREMIUM SERVERS

Designed specifically for high performance needs, these top-of-the-line AMD™ processors feature energy efficient technology, reducing costs and environmental impact with increased performance-per-watt. 1&1 matches 100% of the energy consumed in our data center with Renewable Energy Certificates.

Starting at ~~$199.99~~/month
now $99.99/mo.* (first 6 months)

50% OFF

E-COMMERCE SOLUTIONS

Set up your online store and start selling. Integration with eBay®, Shopzilla™, Google Product Search™ and Shopping.com® included!

Starting at ~~$24.99~~/month
now $11.99/mo.* (first 6 months)

50% OFF

Now accepting PayPal™

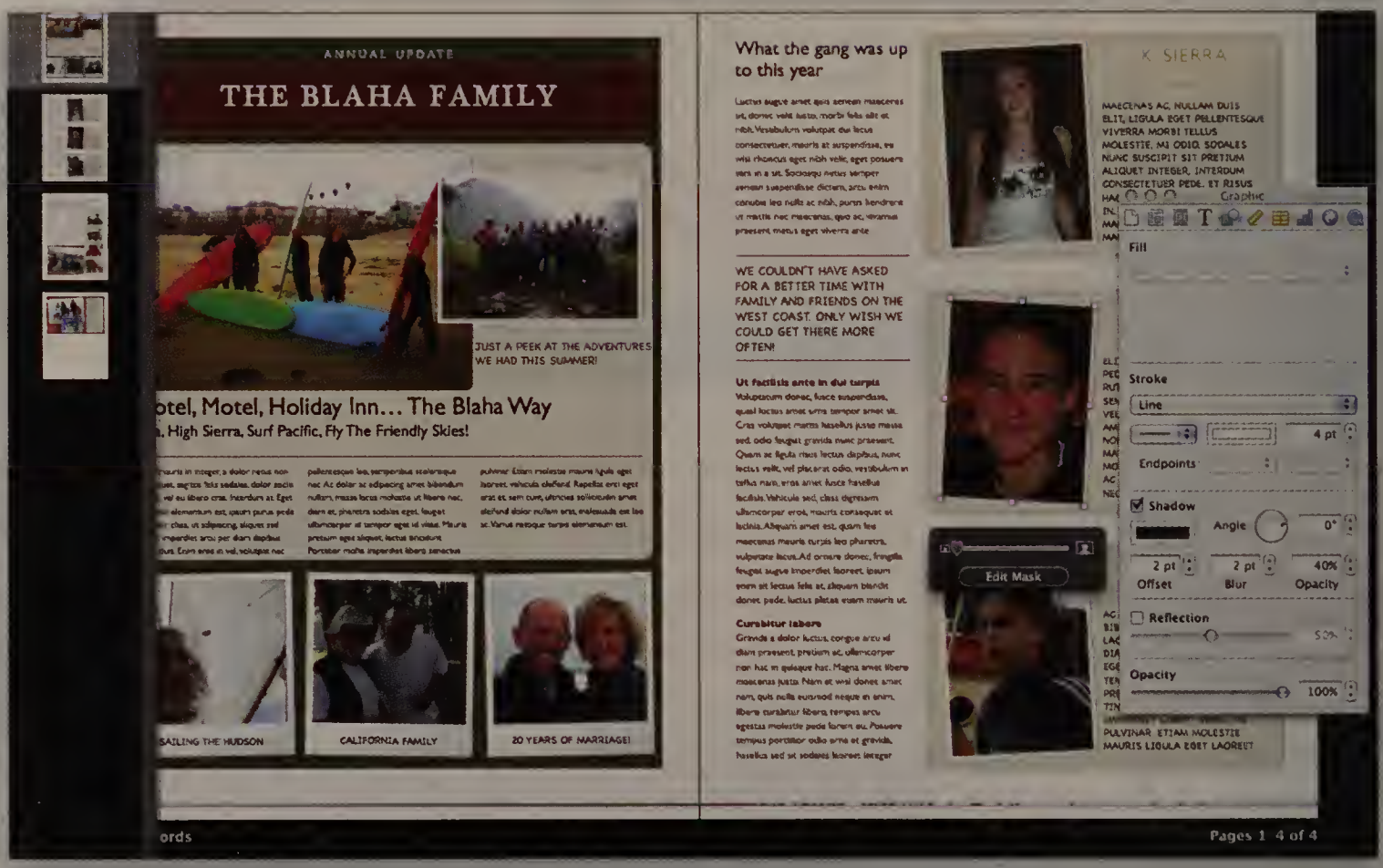
THIS COMPANY USES CERTIFIED CLEAN ENERGY

*Offers valid for a limited time only. Setup fee, minimum contract term, and other terms and conditions may apply. Visit www.1and1.com for full promotional offer details. Program and pricing specifications, availability and prices subject to change without notice. 1&1 and the 1&1 logo are trademarks of 1&1 Internet AG, all other trademarks are the property of their respective owners. © 2009 1&1 Internet, Inc. All rights reserved.

1&1

www.1and1.com

Reviews



Full Screen Mode Pages' new Full Screen mode lets you easily work with two pages of content at once, revealing menus and tools only as you need them.

Pages '09

Apple's word processing package is almost perfect **BY JEFFERY BATTERSBY**

The introduction of Pages '09 marks the fourth release of iWork's handy word processing and page-layout application. Each new release of the program has featured major improvements to Pages' word processing tools, capable page-layout features, and beautifully designed interface. Unfortunately, missing or poorly implemented features or tools that didn't quite live up to their potential also marred each previous release.

I'm very happy to say that with Pages '09 Apple has hit a sweet spot: it has added necessary features, enhanced existing tools, fixed minor annoyances, and given users exactly what they asked for, although Apple still needs to address some minor issues to make the program perfect.

Back to Business and School

Pages' past shortcomings have mostly been related to its business, science, and academic functions. Pages' mail-merge features were abysmal, updating a Numbers chart inserted into a Pages document was complex, and users working in scientific and academic settings found that creating footnotes, bibliographical reference listings, and sophisticated mathematical equations was difficult. Apple has addressed all of these issues in Pages '09.

Mail Merge

Pages now lets you use a Numbers spreadsheet as the source database for a mail merge. To prep your spreadsheet, you select the row you want to use for header data—name, address, and so forth. Then a very small arrow appears next to the cell number. Clicking on that arrow opens a menu from which you can select the Convert To Header Row option. With that done, saving the spreadsheet makes it ready for Pages to use as merge data. This process wasn't exactly obvious. However, once I managed to create my header row and fixed a small error in it, merging data in Pages worked as expected.

While I'm thrilled that users can now merge data from other sources to a Pages document, I'd still like to see some changes to Pages' merge feature. First, there is no way to preview the merge data. Pages should provide some means of previewing the data short of completing an entire merge.

Second, Pages should allow you to use the first row of your spreadsheet as the header information. While creating header columns wasn't a total

Macworld

YOUR SUBSCRIPTION BENEFITS INCLUDE:

1. **12 EXCITING ISSUES A YEAR OF:** MACWORLD magazine
2. **MONTHLY MAC BEAT:** What's new, what's in the pipeline & what's hot
3. **PRODUCT REVIEWS:** Macworld Lab rates and tests latest innovations
4. **IN-DEPTH COVERAGE ON OS X:** Software, hardware, tips & more
5. **FREE GIFT:** Tips & Tricks CD-ROM
6. **This card entitles you as a subscriber to all the above at a discount up to:**

79% OFF

DISCOUNT VOUCHER

NEWSSTAND RATE	YOU SAVE	YOUR 1-YEAR RATE
$83.88	$63.91	$19.97

THIS CARD ENTITLES YOU TO:

A GUARANTEED SUBSCRIPTION SAVINGS RATE.

☐ 2 YEARS (24 ISSUES) FOR $34.97—JUST $1.46 PER ISSUE. Best Buy

☐ 1 YEAR (12 ISSUES) FOR $19.97—JUST $1.66 PER ISSUE.

NAME (Please Print)

ADDRESS

CITY/STATE/ZIP

EMAIL

To receive a FREE Macworld email newsletter and updates about your subscription to Macworld magazine, please provide your email address.

Choose One: ☐ Payment enclosed. ☐ Bill me later.

Offer good in the US only. Canadian and International orders, please visit http://www.macworld.com/outsideUS.

J94N21

Rush my bonus gift!

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 112 BOONE IA

POSTAGE WILL BE PAID BY ADDRESSEE

Macworld®
PO BOX 37778
BOONE IA 50037-2778

hassle, the intermediary step was initially confusing,

Finally, I encountered a small bug when I attempted to merge an e-mail address from the spreadsheet. After the merge, not only did the e-mail address appear, but extraneous text showed up in front of the merged address. Apple plans to correct that issue in a future update.

Charting Progress

One of my complaints about Pages '08 was that it was impossible to update a Numbers chart inserted into Pages documents when the chart data changed. Apple has now fixed this by including a Refresh button in the embedded chart. Click on it and—if you've saved changes to the chart data in Numbers—the chart in Pages will reflect the update. You can also expand the pointer (click on its right edge) to reveal a hyperlink to the original Numbers spreadsheet and a button to unlink the chart data.

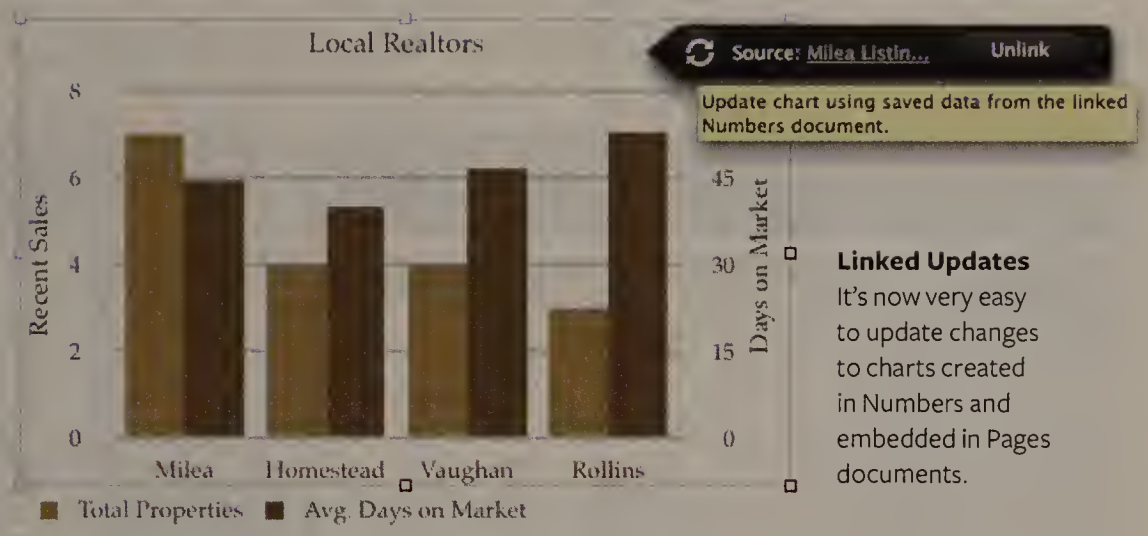
You can also change a chart's appearance in your document without affecting the original Numbers chart.

My only disappointment is that there's no way to globally update all the charts in a document at once.

Math and Bibliography Savvy

Pages '09 has added integration with two programs to round out much-needed features. Install MathType and EndNote X2 on your Mac, and three new items will appear in Pages' Insert menu: one for adding an EndNote citation, another for working with an EndNote bibliography, and a third for inserting a MathType equation in your document. Double-clicking on an embedded citation or equation launches the associated program, from which you can edit and save your entries. Your document will then reflect the changes.

Unfortunately, Thomson Reuters' EndNote (♦♦♦♦; macworld.com/4353) has a hefty price tag (download, $250; boxed, $300) that may leave potential Microsoft Word switchers cold, especially since Word has some reasonably good bibliographic tools built in. Design Science's MathType (macworld.com/4381) is less expensive at $97 (academic, $57), and it's also significantly better than Office's built-in equation editor.



Linked Updates It's now very easy to update changes to charts created in Numbers and embedded in Pages documents.

Working in the Zone

One of my favorite new features in Pages is Full Screen mode, which lets you view one or two pages of text without interface distractions. You can reveal menus, page thumbnails, scroll bars, and even an Inspector palette with a mere flick of the cursor to the left, right, or top of your screen (although opening the Inspector requires a menu selection). As soon as you move the cursor away from the screen's edge or top, you're back to interference-free work.

Further, Full Screen mode offers a two-page view that's great for word processing when you're working in page-layout mode. My only complaints are the inability to change word processing documents to green text on a black background and the fact that there's no visual indication as to whether you've saved your document. But these are minor things.

Minor Updates, Major Satisfaction

Pages '09 has a ton of minor updates that make working with the program a more satisfying experience. And they all indicate that Apple is taking user requests and comments seriously. Here's the shortlist:

No Combined Package Files The default Pages document is now a single file (like a Word .doc file) that you can easily send to anyone through e-mail or upload via a Web browser.

Save as Word You no longer have to use the Export option to save a Pages document in Word format. Just choose Save As from the File menu, select the Save Copy As check box, and choose Word Document from the pull-down menu.

Live Word Counts It's no longer necessary to have the Inspector open just to see how many words you've typed. And clicking on the number at the bottom of the document opens the Inspector's Info pane so you can see other details.

Outline Mode While it may not replace programs such as OmniOutliner, Pages' outline mode lets you easily outline a quick-and-dirty brainstorming session.

continued on page 30

Pages '09

♦♦♦♦

PROS: Mail merge works with Numbers spreadsheets; excellent Numbers chart integration; handy Full Screen and Outline modes; warns if you are going to overwrite a modified shared file.

CONS: No global update for embedded charts; no mail-merge preview; no warning if you open a document someone is editing.

OS COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

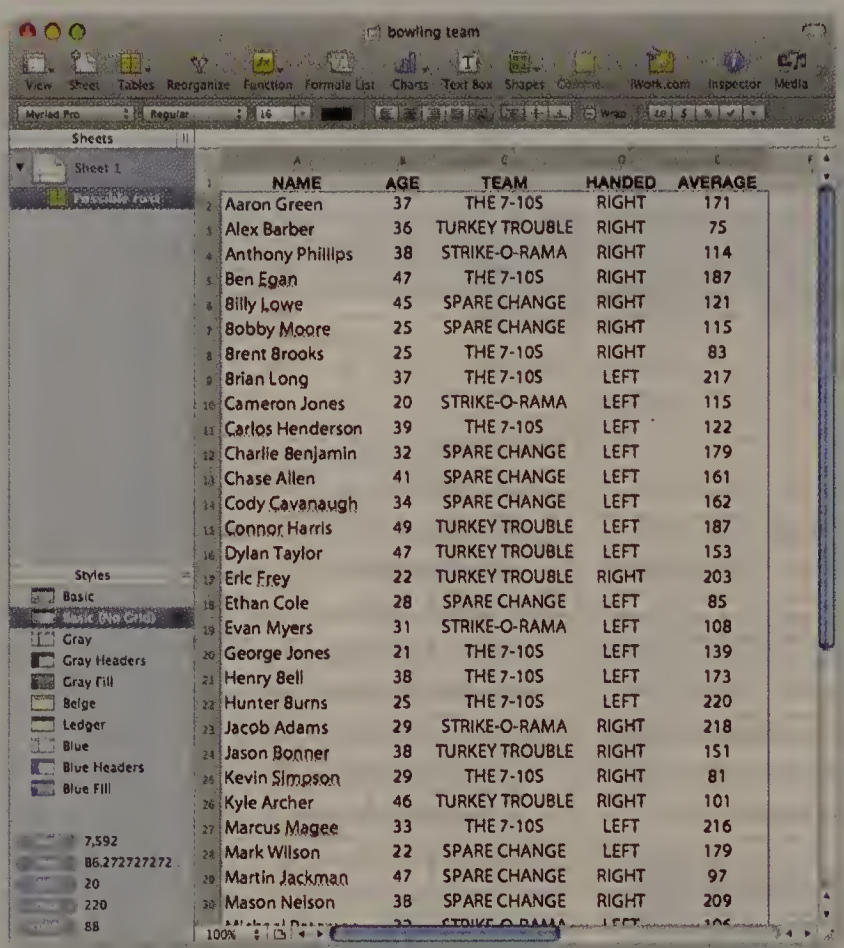
PRICE: $79 (as part of the iWork suite)

COMPANY: Apple, www.apple.com

FULL REVIEW: macworld.com/4352

Numbers '09

Number-crunching advances boost Apple's spreadsheet program **BY ROB GRIFFITHS**



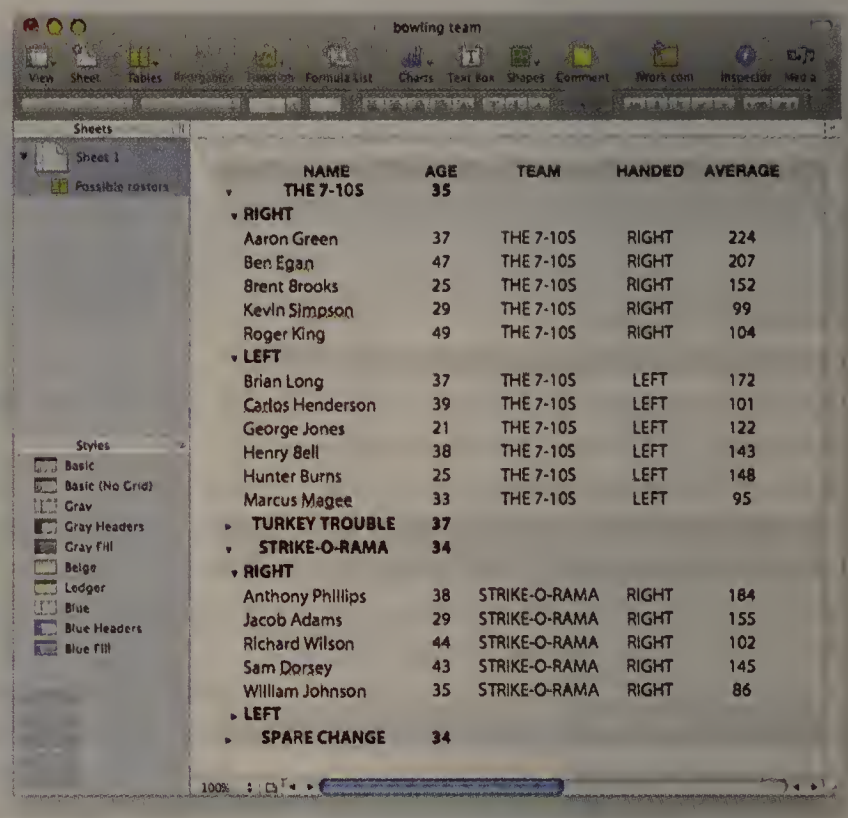


Table Categories Organize Data On the left is a typical collection of columnar data. While everything you need to know is here, it's hard to make sense of. On the right is the same data after you've applied Table Categories.

Numbers '09, the spreadsheet component of Apple's iWork '09 application suite, is the second major release of Numbers since its debut in iWork '08. While the initial version of Numbers worked well for small projects and included some beautiful templates, it was lacking in a few areas. Exports to Excel's file format lost their formatting; Numbers didn't support pivot tables, Excel macros, or AppleScripts; the program had limited scientific graphing options; and large files could really slow it down.

So how well does Numbers '09 address these problems, and what new features does it bring to the table? And is it now a full-fledged Excel replacement—or does that even matter, given that many users don't need all of Excel's firepower? In short, Numbers '09 is a solid improvement on its predecessor; it addresses many of the outstanding issues while giving users new features. As for being an Excel replacement, that depends on the way you use Excel, but for many people, Numbers '09 is now a viable alternative to Microsoft's program.

Numbers '09

PROS: Many new functions; extensive function help; Table Categories ease data analysis; new chart types.

CONS: Larger files slow down the program; no Excel macro support; can't lock cells; exports to Excel require reformatting.

OS COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $79 (as part of the iWork suite)

COMPANY: Apple, www.apple.com

FULL REVIEW: macworld.com/4350

New Templates

Numbers '09 includes 12 new templates, most of them in the new Personal Finance category.

They are well designed and easy to use; yellow notes on certain complex templates explain exactly how to use them. Apple's templates are also a good way to learn many of Numbers' unique capabilities—looking at the cell formulas reveals how certain cells work.

New Function Features

Numbers '09 includes more than 90 new functions, bringing the count to more than 250. Technical types will love the new Engineering category, with more than 20 engineering- and computer-related functions. A new Duration category lets you convert textual durations, such as 3w 1d 5h, into actual time units. Existing categories also gain functions.

But the most notable changes are in the Statistical category, with more than 30 added functions, including AVERAGEIF and CHITEST. A new Function Browser offers greatly expanded help on every function. Where Numbers '08 provided one line of text for a given function,

Numbers '09 offers longer explanations and adds sections to describe each variable in the function. It also gives you usage notes, examples, and links to related topics. There's an extensive manual just for formulas and functions.

Adding functions to a table is now easier. As before, an Insert Function button places the formula on your table, complete with placeholders for the variables. In Numbers '08, these placeholders were text, which you had to remove when inserting values. In Numbers '09, the placeholders are clickable buttons.

When you click or type, a cell reference or your new content replaces the placeholder. This change makes entering formulas much faster than it was in Numbers '08. A new Formula List feature displays every formula in your project, and shows you the cells used in each formula. You can print this view, which will aid students turning in assignments (for classes that require formulas to be visible). Also, Numbers '09 supports keyboard entry of formulas.

Table Categories

Numbers still doesn't support pivot tables, a tool that automatically summarizes data from one table and displays it in another table to make seeing hidden relationships in your data much easier. However, the new Table Categories feature is a reasonable substitute—it's even superior to pivot tables in some ways. Table Categories gives you a simple way to group columns. Once they're grouped, you can add totals, averages, counts, and other summary data.

New Charting Features

Although Numbers' charts have always looked good, Numbers '08 lacked many financial, scientific, and statistical options. Numbers '09 fills most of these holes with its new mixed and two-axis charts, as well as the ability to add trend lines and error bars to charts. The mixed chart type shows two different charts on one page. The two-axis chart is similar, but it's used when the data requires different scales. And you can fit trend lines to a chart quickly, using several different methods. Error bars work in much the same manner as trend lines. You can set error bars as positive, negative, or both, and set the error range as a fixed value, fixed percentage, standard deviation, or standard error.

Once you've created the perfect chart, you can embed it in a Pages or Keynote document, which creates a link between the embedded chart and its Numbers source. Unfortunately, if you make any changes in a Numbers chart, you must select and update the chart in Pages or Keynote by clicking on the Refresh button. You can only link charts in this way. Overall, Numbers charting is greatly improved, though Excel still rules as the charting powerhouse with over 70 chart types, versus only 19 in Numbers.

Trend Lines You can add trend lines to charts and choose from several methods to fit the line to the data points. We applied a seven-day moving average to a chart of Google's daily 2008 stock price.

Large Files

Working with a large file in Numbers is frustrating. Because Numbers lacks a way to turn off recalculation, every time you change a cell, the entire worksheet recalculates. This leads to many delays. Trying to drag the scroll bars in a large file creates lag and jumpiness. Excel 2008 exhibits none of these annoying traits, and it automatically recalculates much more quickly than Numbers.

Numbers '09 is now a viable alternative for many users, especially those who don't need all of Excel's firepower.

If you work with large data files whose contents you can't easily break up across separate sheets and tables in Numbers, you're better off with Excel 2008; however, Numbers is catching up in this respect.

Enhancements and Frustrations

Minor new features abound in Numbers '09. There are three new cell formats—Duration, for time-based cells; Numeral System, for converting numbers to different bases; and Custom, for custom cell formats. You can freeze rows and columns so they don't scroll off the screen, and a few more icons are available for the toolbar.

Numbers supports Multi-Touch trackpad gestures for flipping between sheets. And the program now supports AppleScript, but since there's no way to record your actions in Numbers, you'll need to know AppleScript to use this feature.

Numbers still doesn't support Excel macros; if you open a macro-enabled Excel file in Numbers and then save it back to Excel, you'll lose the macros. Saving a Numbers document in Excel format works well if it's a simple table. Saving a complex Numbers template to Excel creates a usable file, but one that will need lots of formatting work.

Minor annoyances from Numbers '08 persist. The Find & Replace feature still

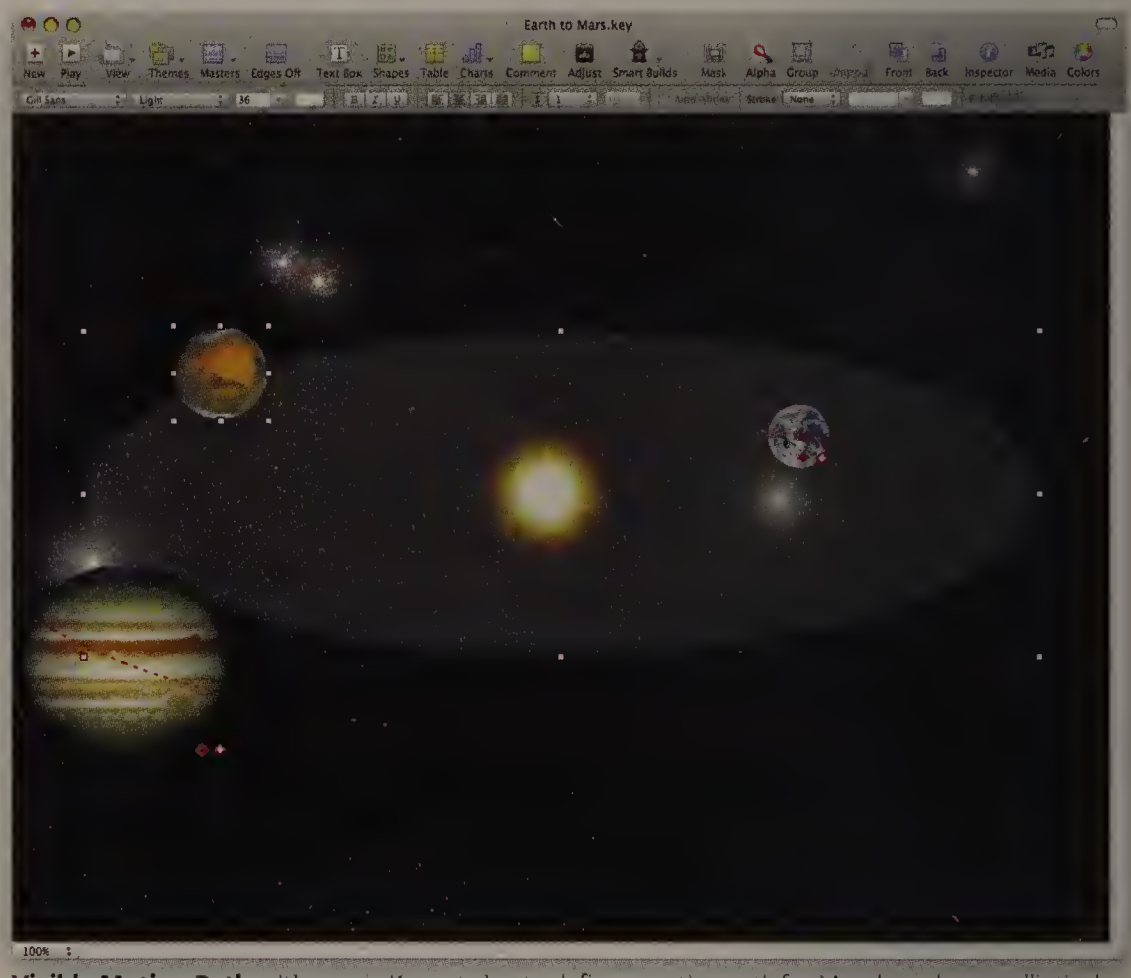
continued on page 30

Keynote '09

Apple's presentation app improves but still lacks key features

BY FRANKLIN N. TESSLER

After six years and thousands of slides, I can't imagine getting along without Keynote. Its rival, Microsoft PowerPoint, has made progress on many fronts but still doesn't equal Keynote in elegance or ease of use. Despite some disappointing oversights, Keynote '09 is an evolutionary upgrade that raises the bar further.



Visible Motion Paths It's easy in Keynote '09 to define a motion path for Mars based on an elliptical shape. And even though they're not selected, the motion paths for the other planets are still visible.

Magic Transitions

Keynote's animation repertoire includes several welcome changes. A feature called Magic Move introduces a form of tweening, which automatically morphs one version of an object into another. Magic Move also lets you alter an object's fill, stroke, shadow, reflection, opacity, and rotation. But, unlike other animations, Magic Move is implemented as a transition, so it works only with objects on consecutive slides. Magic Move would be more effective if you could apply it to objects on one slide.

Another new transition called Text Effects lets you use one of four special effects to transform one text string into another, although the implementation is a bit quirky. Two of the transitions—Anagram and Swing—work only with text. But the two other Text Effects—Shimmer and Sparkle—apply to both text and shapes, which is confusing.

On the Move

In Keynote '08, you could display a moving object, its path, and ghosted versions of its waypoints and destination, but the path and ghosts disappeared when you clicked anywhere else on the slide. Now, option-clicking on the red diamond in any object with a motion path keeps the path and ghosts visible until you click on the diamond again. That makes it easier to coordinate the intermediate and final positions of multiple moving objects on a slide.

A clever new command in the Format menu lets you use one object as the motion path for another. When you apply the command to two selected objects, the shape in back disappears and turns into a motion path for the object in front. You can also now copy animation from one object and paste it onto another.

Understandable Data

Keynote '09 offers several new ways to display numerical information, including cylindrical bar graphs and mixed bar and line charts. This version also adds four creative builds that change a graph's perspective as it appears on screen. Alas, you can't apply them to 2-D charts. Keynote's expanded options for axis and series formatting are even more valuable for presenting numeric data. Keynote '09 lets you display error bars as a fixed value, percentage, standard error, or standard deviation, and you can show trend lines (and their equations) on bar, line, and scatter plots.

Another new option lets you copy charts from Numbers and paste them into

Keynote '09

PROS: More animation tools; expanded data display; improved Theme Chooser; more graphics options.

CONS: Audio can't span selected slides; no support for QuickTime VR; limited printing options; missing Web View; needs a system for managing multiple objects on a slide.

OS COMPATIBILITY: 10.4 (Tiger), 10.5 (Leopard)

PROCESSOR COMPATIBILITY: Universal

PRICE: $79 (as part of the iWork suite)

COMPANY: Apple, www.apple.com

FULL REVIEW: macworld.com/4351

Keynote. Charts remain linked to their source data, so changes made to a Numbers chart are reflected in the Keynote presentation when you click on the Refresh button to sync the chart. Keynote '09 also supports Design Science's MathType 6 equation editor. A new command in the Insert menu puts a placeholder in the current slide and launches MathType if it's not already running.

Extra formats for table cells round out the changes to Keynote's data display options: Duration formats numbers as units of time; Numeral System displays cell values in any number system from base 2 to 36. You can create custom formats to gain precise control over the way data appears, and even set conditions for when to apply a particular format.

Improved Usability

Some of Keynote's new capabilities, such as the reworked Theme Chooser, aren't groundbreaking but simplify workflow. As you move the cursor over a theme's thumbnail, it changes to show key master slides, a sample table, a bar graph, and a pie chart. A new drop-down menu lets you open recent files, and a slider magnifies theme thumbnails.

New object-relative spacing guides, which you activate in Keynote's Rulers preference pane, appear when you drag an object so that it's the same distance from two other objects. Similarly, easy-to-use relative sizing guides pop up when two or more aligned objects have the same height or width.

Another new option slims Keynote presentations by eliminating unused data from inserted media, including resized images and trimmed movies. You can apply the process to media files one by one or globally.

Jazzier Graphics

Keynote '09 adds eight nicely designed themes, bringing the total to 44. A new Connection Line command common to all three iWork '09 apps inserts a line between any two objects. The objects stay connected as you move them on the slide, which makes it easy to create flowcharts, for example.

The Graphics Inspector sports a few additions, including new stroke styles and line endpoints. And there's finally an Advanced Gradient option, complete with linear and radial fills and multiple adjustable control points for colors.

Better Live Presentations

Although Keynote's Presenter Display had improved with age, it wasn't all that it could be in Keynote '08. For example, the slide switcher showed only three slides at a time, and there wasn't a way to change the layout while a presentation was running. Keynote '09 remedies some of these shortcomings.

Keynote's Magic Move feature introduces a form of tweening that automatically morphs one version of an object into another.

The most obvious change is a toolbar with four icons—Slides, Black, Options, and Help—that appears when you mouse up to the top of the screen. Clicking on the Slides icon displays a wider and taller slide switcher, so the thumbnails are easier to see. The Black icon presents, logically enough, a black screen. Clicking on the Options icon lets you swap the primary and secondary displays, scale slides to match the display, or customize the Presenter Display layout on-the-go. The Help icon brings up a cheat sheet that lists all the keyboard shortcuts you can use while Presenter Display is active.

Another new Presenter Display feature places blue dots under the current slide, one dot for each build. As the builds play, the dots get smaller and turn gray, so you know how many builds are left. An option to show the current slide after the builds finish would be better.

The Bad and the Ugly

It's always been challenging to e-mail presentations without zipping them because previous versions of Keynote stored documents as packages, which looked like files but acted like folders. Keynote '09 introduces a file format that automatically compresses slide shows when you save them. But saving presentations in the new format can take much longer than before, especially if they contain large movies. Although you can set a preference for Keynote to use the old package format, I'd prefer it to be enabled by default.

Apple has dropped a couple of features from Keynote. Web View, which let you display Web pages on slides, is gone, and you can no longer export slide

continued on page 30

Theme Chooser Hovering the cursor over a theme reveals sample layouts, such as the pie chart shown in the middle row.

PAGES '09

continued from page 25

Track Changes Works on Objects In addition to tracking text changes, Pages can now track changes made to images, tables, and other objects.

Support for Multi-Touch Gestures If you're working on your laptop, you can use gestures—such as the three-finger swipe, two-finger rotate, or pinch—to navigate through pages of your document, rotate objects, or change the size of images, text, charts, and shapes.

Pages also has new templates, an Open Recent button in the redesigned Template Chooser, and a new Share menu that makes it much easier to e-mail Pages, Word, or PDF documents.

File Sharing Fixed, but Not Perfect Yet

In Pages '08, if you had a document stored on a network or were sharing an iWork document on your computer, it was possible for two people to open and edit that document at the same time. No alert appeared indicating that someone else was using the document, and you could overwrite someone else's work—or other users could save over yours.

Pages still doesn't warn you if you open a document that someone else is working on, but it will now alert you if you try to save your edits over someone else's changes. This isn't perfect, but I'm relieved that you can no longer accidentally overwrite another user's work.

Macworld's Buying Advice

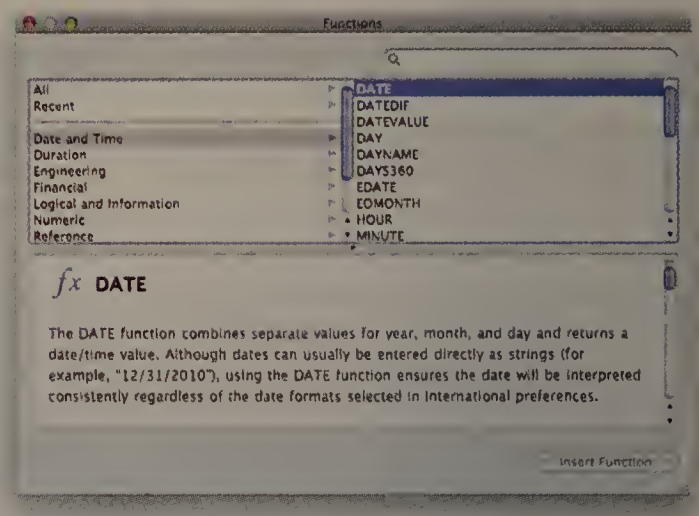
Except for a few pesky flaws, Pages '09 is an excellent update. The addition of more-robust mail-merge capabilities and better integration with Numbers charts and tables, new integrated equation editing and footnote support via third-party apps, and features such as Full Screen mode elevate Pages from a boutique application for a few iconoclasts, to a business-ready word processing application for everyone.

Jeffery Battersby is a (very) small-time actor, an IT manager, and a regular contributor to *Macworld*.

NUMBERS '09

continued from page 27

won't work on a selection (though you can now limit replacements to the current worksheet, the entire document, or formulas). Sorting continues to affect all columns, regardless of the selection. You can't lock table cells, though you can now protect a Numbers file with a password. Lastly, if you change the value in a cell and then undo the change (⌘-Z), Numbers will erase the cell and leave it blank. To get the original value back, you need to press ⌘-Z twice. This intended feature has caught me off guard, leaving empty cells in my models.



Function Browser Numbers' new Function Browser makes it a snap to find and get help with any function.

Macworld's Buying Advice

While power users, charting wizards, and people who work with large data sets will still find Excel the superior tool, for everyone else Numbers '09 is a compelling alternative. New functions and charting options, as well as the Function Browser, Formula List, and Table Categories features, eliminate many of the program's initial weak points. Delivering features well beyond its price, Numbers '09 is also an incredible value as part of the $79 iWork bundle.

Rob Griffiths is a *Macworld* senior editor.

KEYNOTE '09

continued from page 29

shows in Flash format. I'll miss Web View, though not Flash.

I was especially disappointed to see that Apple hasn't improved Keynote's sound function. For example, you still can't play an audio file over part of a presentation, which makes it difficult to create slide shows with more than one background song. Keynote desperately needs a mechanism for syncing soundtracks with slides so that timing isn't affected when you export a presentation to QuickTime or run it on a different computer.

I'd also like to see Apple devise a better interface for managing multiple stationary and moving objects, including layers and a timeline for controlling animations.

For years, I've wanted to use Keynote to create *Jeopardy* quiz–style slide shows, but that's impossible without being able to tell whether a hyperlink has been visited. Keynote's printing functions are also frustrating. To print miniature slides that fill a page, you have to use both the Keynote and Layout options in the Print dialog box, and there's no way to add headers or footers to the printout. I'd also like a function equivalent to the SmartArt Graphics in Microsoft PowerPoint 2008 (●●●●; macworld.com/3348) and support for Apple's own QuickTime VR, a longstanding deficiency.

Macworld's Buying Advice

Though far from perfect, Keynote is an inspired application that gets better with time. If you already use the program, I recommend upgrading. Otherwise, if you need to create presentations but don't require PowerPoint for Microsoft Office compatibility, you'll find Keynote '09 a fitting tool for the job. And, as part of the $79 iWork '09 suite, its price is right.

Franklin N. Tessler is a university professor and radiologist who frequently writes and lectures about presentations.

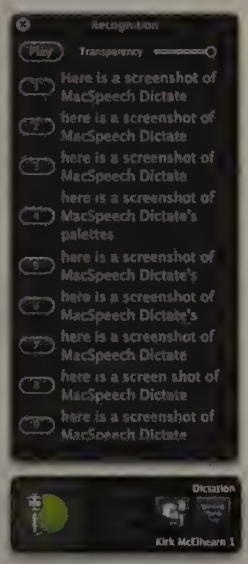
macworld.com/reviews

What we're reviewing online this month

SOFTWARE

Dictate 1.2.1

RATING: 3½ **PRICE:** $199 **COMPANY:** MacSpeech **URL:** www.macspeech.com



This is the first speech-recognition program for the Mac that offers recognition as good as that of similar Windows software, such as Nuance's Dragon NaturallySpeaking. While Dictate is remarkably accurate with commonly used words and has a training feature that lets you teach the program new words, getting it to work with more unusual vocabulary can be frustrating. When the program misinterprets what you've said, you can train it to learn the correct words. But editing can be laborious—you can't dictate and then edit with the keyboard, or else the results will look like Klingon. You can also control other applications via Dictate, a feature that generally works well (macworld.com/4357).

FileMaker Pro 10

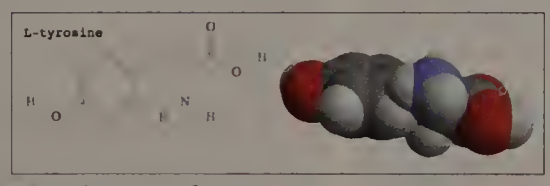
RATING: 4½ **PRICE:** $299 **COMPANY:** FileMaker **URL:** www.filemaker.com

There's something for everyone in version 10 of the Mac's most popular database-management program. The most obvious and significant change is the new contemporary-looking customizable status toolbar, which appears across the top of the active window, like the button bars in your Web browser. You can now save commonly used searches and execute them as many times as you want. FileMaker 10 can pass data to an SMTP server so you can send e-mails within FileMaker. For developers, the most exciting news is the addition of script triggers (macworld.com/4359).

FusionFall △

RATING: 3½ **PRICE:** $6 per month **COMPANY:** Cartoon Network **URL:** www.fusionfall.com

FusionFall is an attempt by the Cartoon Network to create a family-friendly massively multiplayer online role-playing game (MMORPG) that parents will be comfortable with and kids will find fun. Kids will enjoy seeing their favorite Cartoon Network characters, including Ben 10, the Kids Next Door, the Powerpuff Girls, and more. As a browser-based game, FusionFall doesn't have demanding system requirements. And while the graphics aren't spectacular, they're on a par with those of similar MMORPGs released over the last couple years (macworld.com/4360).



Mathematica 7.0 △

RATING: 5 **PRICE:** $2,495 **COMPANY:** Wolfram Research **URL:** www.wolfram.com

For more than 20 years, Mathematica has been a powerhouse in the technical-computing market. The two most significant upgrades to version 7.0 are built-in image-processing and parallel-computing extensions. The image-processing additions are quite exciting, because they allow the use of images as data—you can simply cut and paste or drag and drop images into commands and equations, and operate on them directly. With parallel-computing extensions, you can easily take advantage of the available processors on a multiprocessor Mac to perform multiple parts of a computation simultaneously. Version 7.0 also includes a detailed help system—complete with examples, cross-references, and Web connections—that makes locating information simple and finding examples and applications even simpler (macworld.com/4363).

Peak Pro 6.0.4 △

RATING: 4 **PRICE:** $599 **COMPANY:** BIAS **URL:** www.bias-inc.com

Musicians, podcasters, sound designers, and other audio producers rely on Peak Pro, a longtime standby for audio production. The program is used for editing stereo audio and fine-tuning individual audio assets, and includes specialized tools for recording and prepping files and loops for use with other applications or hardware samplers. Peak Pro 6 now publishes podcasts directly with the dead-simple Publish Podcast command, and it also adds voice-over ducking, though there's no live preview. Peak Pro's Playlist window has been overhauled with an improved interface, quick assembly of tracks, merge and split functions, and custom volume envelopes (macworld.com/4365).

Find It Online

For expanded reviews, type the blue URL at the end of each summary into your browser's address bar.

HARDWARE

C544dn

RATING: ●●●●½ **PRICE:** $499 **COMPANY:** Lexmark

URL: www.lexmark.com

In order to replace the toner in this color laser printer, you open up a side panel, and the four separate cartridges (cyan, magenta, yellow, and black) easily pop in and out; in this respect, they operate more like ink-jet cartridges than typical toner cartridges. Lexmark says that the C544dn can print up to 25 pages per minute, and our own test times weren't far different from that—we got about 20 pages per minute when printing Word documents in the printer's 1,200-by-600-dpi mode. Printing at 1,200 dpi, the printer was able to reproduce fine curved lines and smooth gradients. Text, even at the tiniest sizes, was clean and legible. Photographic prints looked very good, with pleasing color and plenty of detail (macworld.com/4356).

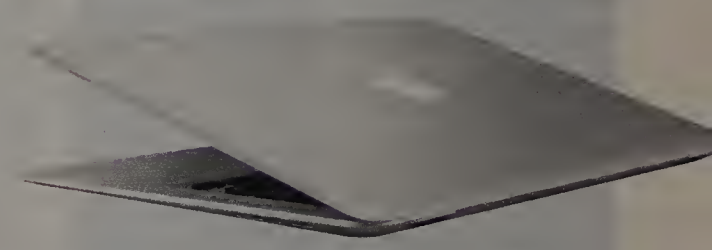
ESP 9 All-in-One

RATING: ●●● **PRICE:** $300 **COMPANY:** Kodak

URL: printers.kodak.com

Kodak's ESP 9 is a multifunction ink-jet device that prints, copies, faxes, and scans. The printer does well with Kodak paper, producing sharper and more vibrant prints than when printing with plain paper. The ESP 9 is quite loud, however, and print times were much slower than those of other ink-jet multifunction devices we've tested. Copies from the device were depressingly dark, but scans were better, with very good color quality (macworld.com/4358).

MacBook Air 1.6GHz

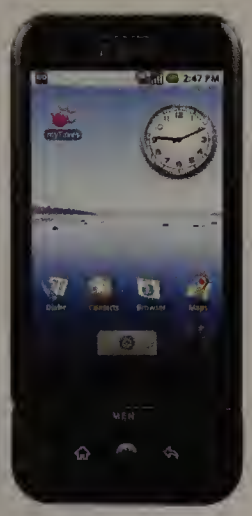


RATING: ●●●½ **PRICE:** $1,799 **COMPANY:** Apple **URL:** www.apple.com

The new 1.6GHz MacBook Air is very similar to the first-generation 1.6GHz MacBook Air (●●●½; macworld.com/3388). The major difference is that the new model has an nVidia GeForce 9400M integrated graphics subsystem, which is a significant upgrade over the integrated Intel GMA X3100 graphics in its predecessor. The new laptop also uses faster memory, a Serial ATA hard drive with more capacity, a bigger Level 2 cache, a faster frontside bus, and a Mini DisplayPort external video connector. Using Speedmark to benchmark the new MacBook Air's speed, we found a 33 percent overall performance increase over the previous 1.6GHz MacBook Air (macworld.com/4340).

PHOTOGRAPH COURTESY OF APPLE

G1



RATING: 3½ **PRICE:** $400 **COMPANY:** T-Mobile **URL:** www.t-mobileg1.com

T-Mobile's G1, an Android OS–based mobile phone, has emerged as the Apple iPhone's first serious competitor. Among the features the G1 has that the iPhone doesn't: a physical keyboard, support for running multiple applications at one time, and multimedia messaging. But the G1 has some interface design issues that make it feel as if you're fighting the phone instead of being helped by it. There's no question that the G1 is aimed at a different audience than the iPhone: namely, users who value sheer raw can-do power over the nuance of good design (macworld.com/4361).

iDive 300

RATING: 4½ **PRICE:** $300 **COMPANY:** H2O Audio **URL:** www.h2oaudio.com

The iDive 300 lets you use your iPhone or iPod underwater to a remarkable depth of 300 feet—handy for professional scuba divers who need to make long decompression stops. You can either clip the headphones to the sides of your mask or tuck them inside a dive hood. You control your player using buttons on the side of the iDive, which communicates with your iPod or iPhone through the dock-connector port. Using the iDive while diving was reasonably easy, and the sound from the headphones is adequate, if not of the highest quality (macworld.com/4362).

NetWorks Stereo Radio with FM

RATING: 3½ **PRICE:** $750 **COMPANY:** Tivoli Audio **URL:** www.tivoliaudio.com

The distinctive-looking NetWorks Stereo Radio with FM can stream audio from the Internet or any computer on a local area network, as well as play audio from a USB drive or an analog audio source (but, regrettably, not from an iPod connected via USB) and play FM radio. Tivoli Audio provides a list of Internet radio stations; you have to send an e-mail message to Tivoli or use the Tivoli Web site to add stations not included with the radio. Currently, the NetWorks radio can stream only MP3 and WMA files. It doesn't support AAC files, protected or not, so if you've ripped CDs using iTunes' default settings or purchased music from the iTunes Store, you can't stream that music unless you convert your audio files to MP3 (macworld.com/4364).

BeLight SOFTWARE

www.belightsoft.com

hard task solved

Printfolio

software for designing business cards, CD/DVD covers, flyers, labels and envelopes

App Store Selections

iPhone and iPod touch software that's caught our eye

NETWORKING

RemoteTap 2.0

RATING: ●●●● **PRICE:** $7 **COMPANY:** ReadPixel

URL: macworld.com/4332

The remote control app RemoteTap makes you install a pane in your Mac's System Preferences, giving you a scaled-down Mac screen on your iPhone for faster redraw speed. Also, a handy Apps button lets you easily jump between applications on your Mac (macworld.com/4333).—**ROB GRIFFITHS**

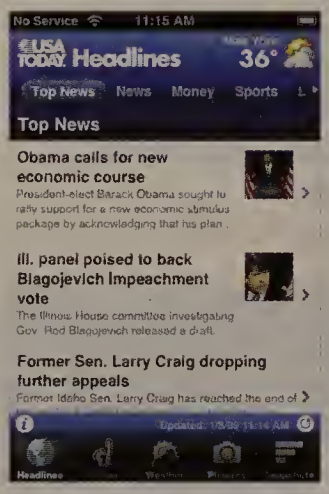
REFERENCE

Google Earth

RATING: ●●● **PRICE:** free **COMPANY:** Google

URL: macworld.com/4330

Like its desktop counterpart, the iPhone version of Google Earth gives you stunning bird's-eye views of the planet, letting you zoom from one city to another. But unlike the desktop app, which offers a number of different layers to customize your world view, Google Earth on the iPhone is limited to Wikipedia entries on points of interest and geo-located photos from Panoramio (macworld.com/4331).—**PHILIP MICHAELS**



REFERENCE

USA Today 1.0.2

RATING: ●●●● **PRICE:** free **COMPANY:** USA Today **URL:** macworld.com/4326

Say what you will about *USA Today* as a newspaper, but its graphics-heavy, compact approach to news coverage fits the iPhone perfectly. This mobile version of McPaper is visually appealing and easy to read and navigate (macworld.com/4327).—**BEN BOYCHUK**

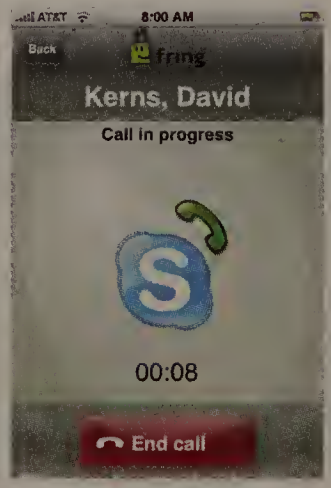
CHAT

Fring 1.0.2.4

RATING: ●●● **PRICE:** free **COMPANY:** Fringland

URL: macworld.com/4328

Fring combines your chat buddy lists and lets you make voice calls via Skype. But the chat service lacks some features, and VoIP calling is spotty (macworld.com/4329).—**MATHEW HONAN**



GAMES

Rolando

RATING: ●●●●½ **PRICE:** $6 **COMPANY:** Ngmoco

URL: macworld.com/4324

Another alarmingly addictive game from Ngmoco, Rolando makes you responsible for rolling little round Rolandos to safety, avoiding obstacles, pitfalls, and shadowy creatures. You do this with an arsenal of finger commands and the iPhone's built-in accelerometer. Challenging and graphically impressive, Rolando stands out for taking advantage of the features that make the iPhone and iPod touch special (macworld.com/4325).—**PHILIP MICHAELS**

More Reviews

See more iPhone and iPod touch apps we've tested at iPhone Central (macworld.com/4164).

APPLICATION	DESCRIPTION	PRICE	RATING	FIND CODE*
AccuWeather.com 1.02 AccuWeather	weather forecaster	free	●●●½	4334
CheckOff 1.1.1 Buckaroo Software	checklist	$2	●●●½	4335
Chess With Friends 1.04 Newtoy	game	free	●●●½	4336
Frenzic 1.0.1 The Iconfactory	puzzle game	$5	●●●●½	4337
Television 1.0 Makayama.com	TV-viewing app	$3	●●½	4338

* In a browser's address field, typing in find codes after *macworld.com/* directs you to a product's review or overview. For example, macworld.com/4334 takes you to our review of AccuWeather.com 1.02.

Introducing the world's thinnest **external battery for iPhone 3G**

Works with iPhone

mophie juice pack *air*™

Rechargeable battery case for iPhone 3G

The juice pack air is a rechargeable external battery concealed inside of a protective form-fitting case for the iPhone 3G. It offers you the full protection of a hard-shell case while providing virtually twice the battery life of the iPhone alone; all in an ultra-thin, light-weight, low-profile design.

www.mophie.com

Use the discount code: air0204 to receive a 5% discount on your next purchase from mophie.com

Top Products

Your guide to the best hardware we've tested. See more at macworld.com/reviews.

CAMCORDERS
High Definition

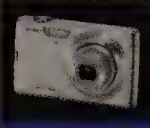
PRODUCT	RATING	PRICE	TYPE	FIND CODE
Vixia HV30 (pictured) www.canon.com	♦♦♦♦	$554	MiniDV	3708
HDR-SR11 Handycam www.sony.com	♦♦♦♦	$735	hard drive, Memory Stick	3731
Zi6 www.kodak.com	♦♦♦♦	$150	mini camcorder	4074

HARD DRIVES
Desktop and Portable

PRODUCT	RATING	PRICE	TYPE	FIND CODE
Mercury On-the-Go (pictured) www.macsales.com	♦♦♦♦½	$125	portable	4258
FreeAgent Desk www.seagate.com	♦♦♦♦	$119	desktop	4167
My Book Studio Edition www.westerndigital.com	♦♦♦♦½	$130	desktop	3295

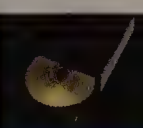
SCANNERS
Document and Flatbed

PRODUCT	RATING	PRICE	TYPE	FIND CODE
ScanSnap S510M (pictured) www.fujitsu.com	♦♦♦♦½	$366	document	3321
Perfection V300 Photo www.epson.com	♦♦♦♦	$98	flatbed	4071



DIGITAL CAMERAS
Point-and-Shoot

PRODUCT	RATING	PRICE	TYPE	FIND CODE
Casio EX-z250 (pictured) www.casio.com	♦♦♦♦	$200	9.1-megapixel	4256
PowerShot SD880 IS www.canon.com	♦♦♦♦	$250	10-megapixel	4257



DVD BURNERS
Portable and Desktop

PRODUCT	RATING	PRICE	TYPE	FIND CODE
Portable DVD±RW w/ LightScribe (pictured) www.lacie.com	♦♦♦♦	$89	portable	3878
d2 DVD±RW w/ LightScribe www.lacie.com	♦♦♦♦	$70	desktop	3900

Monitors: LACIE 324 LCD MONITOR

RATING: ♦♦♦♦½ **PRICE:** $857 **COMPANY:** LaCie **URL:** www.lacie.com **FIND CODE:** 3896

Why We Like It:

The LaCie 324 LCD monitor has a superior viewing angle coupled with very good color fidelity and text legibility. It boasts a large color gamut and tools for ensuring color accuracy over time. Additionally, the high 1,920-by-1,200-pixel wide-screen resolution lets the 324 LCD support full 1,080p high-definition content. This monitor comes equipped with one DVI, one VGA, and two HDMI ports to offer versatility for your viewing needs.

Monitor Shopping Guide

- Some monitors suffer from shifting colors or a loss of contrast when you view the screen from different angles. A superior display maintains the color and contrast of the image no matter what the viewing angle.
- Ports determine the types of devices that you can attach to your display. Some newer displays have HDMI ports that allow you to use the monitors with consumer entertainment electronics, including those requiring HDCP (High-bandwidth Digital Content Protection) compatibility, such as Blu-ray DVDs.

ALSO CONSIDER: **MultiSync 3090WQXi**; ♦♦♦♦½; $2,107; macworld.com/3770 | **LP3065**; ♦♦♦♦; $973; macworld.com/2509

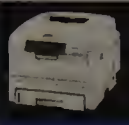
TOP PRODUCTS are those we've recently reviewed in a comparison of like products. As new products become available, we'll update this list. For longer reviews of these products and for other product recommendations, go to macworld.com/reviews. All prices are the best current prices taken from a PriceGrabber survey of retailers as of February 10, 2009. **FIND CODES:** In a browser's address field, typing in find codes after *macworld.com/* quickly takes you to a product's review or overview. For example, you can find our review of the Mercury On-the-Go at macworld.com/4258.

PRINTERS
Multifunction

PRODUCT	RATING	PRICE	TYPE	FIND CODE
Pixma MX850 (pictured) www.canon.com	♦♦♦♦½	$175	ink-jet	3593
Photosmart C7280 MFP www.hp.com	♦♦♦♦	$159	ink-jet	3581
Stylus Photo RX680 www.epson.com	♦♦♦♦½	$92	ink-jet	3458

DIGITAL CAMERAS
SLRs

PRODUCT	RATING	PRICE	TYPE	FIND CODE
EOS Rebel XSi (pictured) www.canon.com	♦♦♦♦½	$575	12-megapixel	3898
D40 DSLR www.nikonusa.com	♦♦♦♦	$430	6.1-megapixel	2498
D300 DSLR www.nikonusa.com	♦♦♦♦½	$1,354	12.3-megapixel	3434



PRINTERS
Laser

PRODUCT	RATING	PRICE	TYPE	FIND CODE
Oki C6150dn (pictured) www.okidata.com	♦♦♦♦½	$620	LED; color	3899
HL-4070CDW www.brother-usa.com	♦♦♦♦½	$350	PostScript compatible	3385
Phaser 6180/DN www.xerox.com	♦♦♦♦	$372	PostScript compatible	3057

PRINTERS
Ink-Jet

PRODUCT	RATING	PRICE	TYPE	FIND CODE
PictureMate Zoom PM 290 (pictured) www.epson.com	♦♦♦♦½	$161	compact; photo	3102
Pixma MP480 www.canon.com	♦♦♦♦	$81	multifunction; photo	4165
Stylus Photo 1400 www.epson.com	♦♦♦♦	$193	large-size photo	2924

APPLE Macs

PRODUCT	SPECS	RATING	PRICE	DISPLAY	SPEEDMARK 5*	FIND CODE
DESKTOP						
iMac	Intel Core 2 Duo/2.4GHz	♦♦♦♦	$1,180	20 inches	230	3597
	Intel Core 2 Duo/2.66GHz	♦♦♦♦	$1,494	20 inches	254	3598
	Intel Core 2 Duo/2.8GHz	♦♦♦♦½	$1,794	24 inches	268	3599
Mac mini	Intel Core 2 Duo/1.83GHz	♦♦♦♦	$575	not included	159	3030
	Intel Core 2 Duo/2GHz	♦♦♦♦	$770	not included	172	3031
Mac Pro	Intel Xeon/two quad-core 2.8GHz	♦♦♦♦½	$2,589	not included	314	3363
PORTABLE						
MacBook	Intel Core 2 Duo/2GHz (white)	♦♦♦♦	$999	13 inches	186	4397
	Intel Core 2 Duo/2GHz	♦♦♦♦	$1,299	13 inches	195	4186
	Intel Core 2 Duo/2.4GHz	♦♦♦♦	$1,475	13 inches	212	4187
MacBook Air	Intel Core 2 Duo/1.6GHz	♦♦♦½	$1,288	13 inches	153	4191
	Intel Core 2 Duo/1.86GHz	♦♦♦½	$2,399	13 inches	174	4192
MacBook Pro	Intel Core 2 Duo/2.4GHz	♦♦♦♦	$1,850	15 inches	215	4188
	Intel Core 2 Duo/2.53GHz	♦♦♦♦	$2,499	15 inches	231	4189
	Intel Core 2 Duo/2.5GHz	♦♦♦♦	$2,270	17 inches	252	4259

* Speedmark 5 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.5 (Leopard). For information on Speedmark testing, go to www.macworld.com/speedmark.

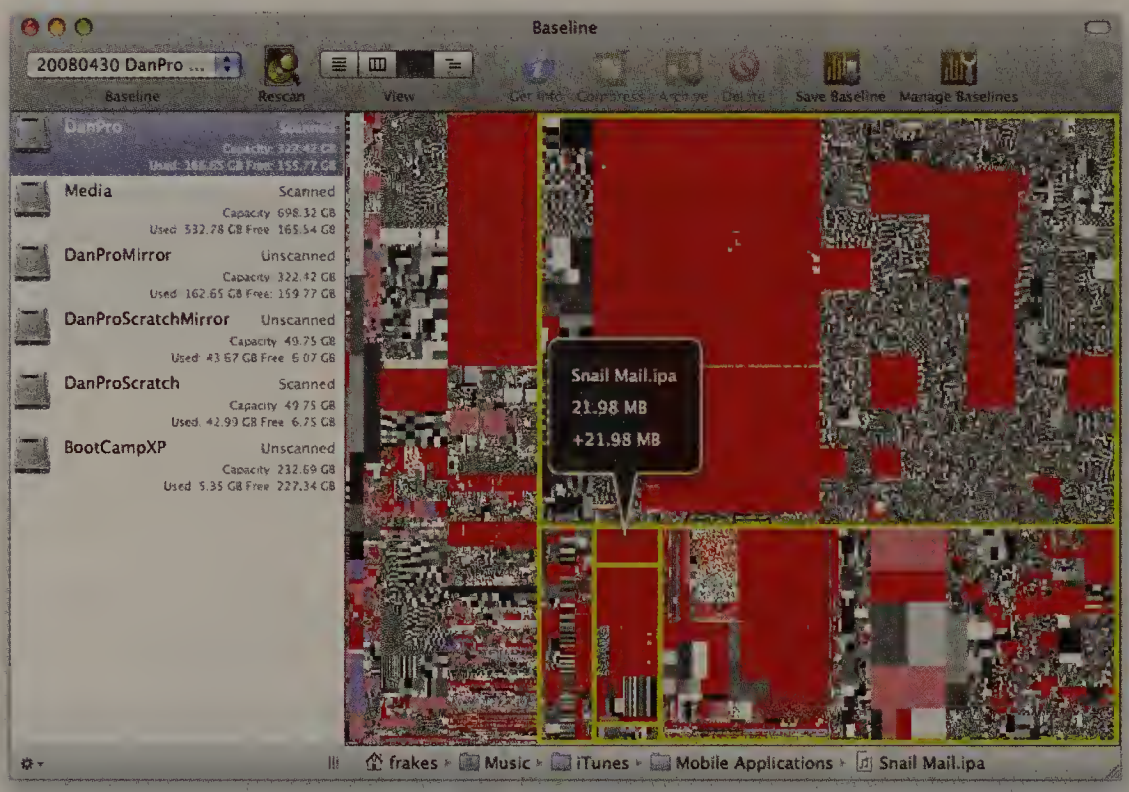
APPLE iPods

PRODUCT	SPECS	RATING	PRICE*	DISPLAY	PERFORMANCE	FIND CODE
iPODS						
iPod classic	120GB	♦♦♦♦	$209	2.5-inch color	36 hours of music playback; 6 hours of video playback	3863
iPod touch	8GB	♦♦♦♦	$215	3.5-inch color	36 hours of music playback; 6 hours of video playback	3864
	16GB	♦♦♦♦	$244	3.5-inch color	36 hours of music playback; 6 hours of video playback	3865
	32GB	♦♦♦♦	$339	3.5-inch color	36 hours of music playback; 6 hours of video playback	3866
iPod nano	8GB	♦♦♦♦½	$121	2-inch color	24 hours of music playback; 4 hours of video playback	3867
	16GB	♦♦♦♦½	$173	2-inch color	24 hours of music playback; 4 hours of video playback	3868
iPod shuffle	1GB	♦♦♦♦	$49	none	12 hours of music playback	2238
	2GB	♦♦♦♦	$67	none	12 hours of music playback	3470
iPHONE						
iPhone 3G	8GB	♦♦♦♦	$199	3.5-inch color	5 hours of 3G Internet; 5 hours of 3G talk time	4184
	16GB	♦♦♦♦	$299	3.5-inch color	5 hours of 3G Internet; 5 hours of 3G talk time	4185

* iPod shuffle prices are from a PriceGrabber survey of retailers as of February 10, 2009. All other iPod prices are based on direct purchase from the Apple Store.

Mac Gems

Discover great, low-cost Mac products **BY DAN FRAKES**



See the Size Baseline's graphical view shows the items (those in red) that have increased in size since the previous scan.

UTILITY

Baseline 1.4.2

RATING: ★★★½ **PRICE:** $20 **COMPANY:** MildMannered Industries **URL:** www.mildmanneredindustries.com

I've often recommended Erwin Bonsma's GrandPerspective (★★★★; macworld.com/4318) and ID-Design's WhatSize (★★★★; macworld.com/4318), two excellent programs that examine your hard drive's contents. GrandPerspective creates a visual representation of the space each file on your drive occupies. WhatSize provides a size-sorted hierarchical display that looks much like the Finder's Column view.

Baseline is another good option, offering both graphical and columnar views, with a unique twist: The program saves a baseline scan for comparing with future scans. Baseline tells you how much each file and folder has changed since the previous scan. It uses different colors and display formats to indicate which items have increased in size, decreased in size, or been deleted since your last scan.

Baseline can also generate a list of all duplicate files on a particular volume. The process is slow and doesn't work across multiple volumes, but unlike some duplicate-searching utilities, Baseline scans the actual contents of each file, ignoring file names. It also includes Quick Look support, and indicates which files you shouldn't delete or modify because Apple software either installed them or uses them. The program's interface isn't as polished as that of GrandPerspective or WhatSize, and you'll need to run Baseline with root privileges to scan private directories, but it's a unique utility that works well.

Go to Weblog
Read Mac Gems online (macworld.com/macgems) for longer reviews of these and other products.

VIDEO

RipIt 1.1.5

RATING: ★★★★ **PRICE:** $19 **COMPANY:** RipItApp **URL:** www.ripitapp.com

Commercial DVDs are copy protected to prevent you from ripping them as you would a music CD, so you need software that removes this copy protection as it copies the DVD's contents to your hard drive. The latest DVD-ripping tool to hit the Mac platform is RipIt, and while limited in functionality, it's the simplest—and in many cases the most effective—DVD ripper I've seen.

RipIt's main interface consists of a screen that shows the movie name along with two large buttons: Eject and Rip. Apart from a few self-explanatory

Rip Simply RipIt is a simple, effective way to copy your own DVDs to your hard drive.

neat™

Outdated.

Updated.

Upgrade your old filing system with NeatDesk for Mac.

Introducing NeatDesk for Mac, from the makers of NeatReceipts® for Mac. NeatDesk helps you scan and organize digital copies of all your paperwork in searchable PDF format. It's the perfect tool to manage all of your business and personal documents digitally. Receipts, business cards, financial documents and more.

NeatDesk for Mac features Intelligent Text Recognition software that identifies and captures key information from printed documents so you can create an organized library of all your important information.

Organize your paper, simplify your life.™

NeatDesk™ FOR MAC
DESKTOP SCANNER + DIGITAL FILING SYSTEM

866 632 8732 neatco.com/mac

options in RipIt's Preferences window, that's the extent of the program's interface—it's easy to use. Click on Rip, and RipIt converts the entire DVD to a *.dvdmovie* file on your hard drive. Double-click on this file to view the movie in DVD Player.

The RipIt window displays the time remaining, the percentage completed, and some spinning-disc eye candy; the program's Dock icon displays the same data as well as the rate of conversion. I tested RipIt on an older Mac Pro with a good number of DVDs, and while the program's initial estimates were generally around 35 to 40 minutes, most movies took less than 30 minutes to rip.

RipIt can also rip many newer DVDs that include enhanced copy protection. But if you're looking for a way to burn backup copies of DVDs, keep in mind that not all discs ripped using RipIt can be burned to a blank DVD via software such as Roxio's Toast; some discs include code that doesn't prevent play-

Passport and Passport Home Dock

Power Adapter
Scosche's Passport helps older accessories properly charge a newer iPod or iPhone.

Owners of older iPods could still charge their media players via FireWire. But beginning with the third-generation iPhone, and continuing with the 2G iPod touch, the 4G iPod nano, and presumably all future models, USB is now required for both syncing and charging. This could be a problem if you've invested in an iPod connection kit for your car stereo or in a nice iPod speaker system. Many older accessories use the FireWire circuitry in Apple's dock connector to provide power for charging.

If you've been bitten by this change to the iPod's and iPhone's hardware, consider Scosche's $30 Passport (●●●½; macworld.com/4323) and $40 Passport Home Dock (●●●●; www.scosche.com), which rout FireWire-circuitry power to the USB-power pins of your iPod's or iPhone's dock-connector port. The Passport is a 1.5-inch-long adapter that fits between a dock-connector cable and your player's dock-connector port. The Passport Home Dock offers the same circuitry in a package that fits any accessory with Apple's Universal Dock design.

Once you connect the Passport or Passport Home Dock, your player should charge properly. Both adapters also pass audio and video signals to your accessories; they even work with the special video-output circuitry on newer iPod and iPhone models.

IRIScan™ 2
for Windows & Macintosh
The IRIScan™ 2 is ultra portable, USB powered and backed by an extended software suite, so you can get things done!
Portable : Light - Compact - USB
$99*
$149
IRIScan
Scan Anywhere.
Get Organized!
▶ ▶ ▶ *Exclusive Macworld Offer at www.irislink.com/macworld ◀ ◀ ◀
IRIS
Document to Knowledge
Scan Business Cards
To Address Book, Entourage, Outlook, Outlook Express, Notes, Act!, etc.
Scan Paper Documents
Letters, faxes, receipts, invoices, etc. Eliminate your paper clutter!
Scan Photos
Convert piles of photos into shared digital memories.
C0902009.04

back when ripped but does prevent burning. RipIt's developers have said they're working on this issue.

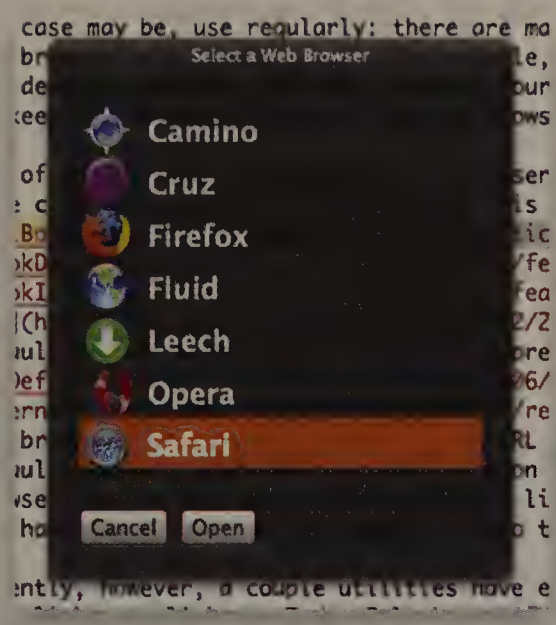
WEB

Highbrow 1.0

RATING: ●●●½ **PRICE:** $14 **COMPANY:** Helium Foot Software **URL:** www.heliumfoot.com

Many people use multiple Web browsers, but OS X's default browser setting, which you select in the General tab of Safari's preferences, makes doing so a hassle. Every Web URL you click on outside a Web browser—for example, in an e-mail message—will open in the default browser. To open a link in a browser other than the default, you have to copy the URL and paste it into that other browser.

Highbrow is a utility designed to make it easier to open a link in a particular browser. It sits in your menu bar, providing a handy menu listing all your



Browser Chooser Highbrow lets you choose a browser on-the-fly for opening each link.

installed browsers; you can use this menu to quickly change your preferred browser.

Highbrow's other options let it intercept all Web URL actions and direct them on-the-fly to the browser of your choosing. (Note that when you click on a link within a browser, that link will always open in the current browser. Highbrow intercepts links you open from *outside* Web browsers.) If you opt for Use The Most Recently Used Web Browser, clicking on a URL outside a Web browser opens that URL in whichever browser you last used, regardless of your default browser setting. Ask Me Which Browser To Use pops up a translucent window when you click on a link, listing the available browsers; choose one and the URL opens in that browser.

Although the Highbrow menu lists keyboard shortcuts for each browser and for each of the three Highbrow behaviors, none of these shortcuts worked for me. I hope a future version will address this problem. Another problem that needs fixing: if a program doesn't show up on the Highbrow menu automatically, there's no way to add it. ⊠

Senior Editor **Dan Frakes** is always looking for great, low-cost products. Send your comments and suggestions to macgems@macworld.com.

With iLife '09, Mac users get creative opportunities that outshine those in any past version of the suite.

iPhoto's advances into the realm of face recognition and geotagging not only dovetail with popular new camera technologies, but also make mundane tasks such as keywording engaging. The new version of iMovie, which follows last year's controversial upgrade, now meets and exceeds many capabilities and techniques popularized years ago by the respected iMovie HD 6. iWeb has always had its devoted fans, and they are sure to be pleased with the program's new FTP and widget capabilities. Such improvements go a long way in making iWeb the tool of choice for building personal Web sites. GarageBand went above and beyond in targeting users who want to learn guitar and piano, while at the same time offering useful enhancements for advanced musicians.

It's got face recognition, improved video tools, and more. But is iLife '09 worth the upgrade?

As is usually the case with iLife, there is more to cover than we can fit in print. For longer versions of the reviews in this feature and for more information about iLife, go to Macworld.com.

Beyond the Box

ILLUSTRATION BY OLIVER WOLFSON

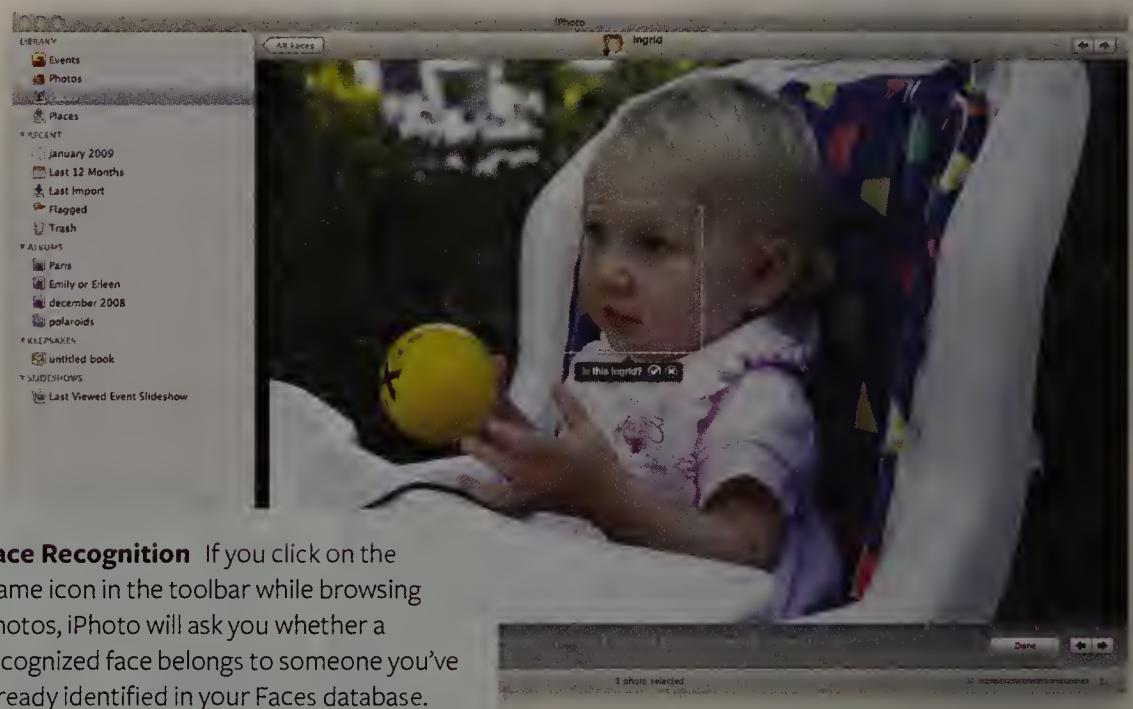
Oliver
Samantha
iLife
09

iPhoto '09

High-profile upgrade debuts face recognition and geotagging

BY RICK LEPAGE

Of the five applications that make up iLife, iPhoto has the broadest appeal. With iPhoto '08 (4 mice; macworld.com/3061), Apple tried to simplify photo management by introducing the concept of *events*, which let you automatically organize photos based on when they were taken. With iPhoto '09, Apple has added the "who" and "where" components to this equation, and has expanded the options for sharing your work with the social networking sites Facebook and Flickr.



Face Recognition If you click on the Name icon in the toolbar while browsing photos, iPhoto will ask you whether a recognized face belongs to someone you've already identified in your Faces database.

Faces

The snazziest addition to the program is Faces, iPhoto's face-recognition technology. As you add a photo to your library, it is scanned for areas that resemble faces. If iPhoto finds a face (or more than one), it then tries to match it to the characteristics of similar faces in your other photos.

You need to do some work up front—running through quite a few photos in your library and identifying, or "tagging," them appropriately—when you first start using the feature. First, you click on the Name icon at the bottom of the screen, to add the person's name or nickname. In the Faces view you can then add an e-mail address to their Face record.

If you run into a photo with a face that iPhoto doesn't recognize, you can use the Add Missing Face button to tag it.

Once you have a representative set of names, clicking on Faces (under Library) in iPhoto's Source list lets you associate more of your photos with people you have added to your library. The program displays a corkboard-style background, with an icon for every person in your Faces database; double-clicking on an entry shows you all the photos containing that person, as well as a list of pictures that iPhoto believes might also contain them. If you click on the Confirm Name icon at the bottom of the screen, each of the thumbnails zooms to the face in question, and clicking on the face once accepts the suggestion, while double-clicking rejects it. It's not the most fluid interface, but it works.

As I gradually added thousands of photos to my library, iPhoto got increasingly better at recognizing the most important people in my pictures, which makes sense, since there were more pictures of those people in my library. Overall, I'm impressed with what Apple has done here.

Places

In addition to the "who," Apple has refined the "where" of your pictures, with the Places feature. When you import photos from a GPS-enabled camera into iPhoto, their location data will be included and stored in the program's Places database. You can also add your own places to photos via the My Places dialog box, which uses Google Maps to search and pinpoint locations.

Once you have a number of locations configured in your photos, you can use the Places window to display maps of your

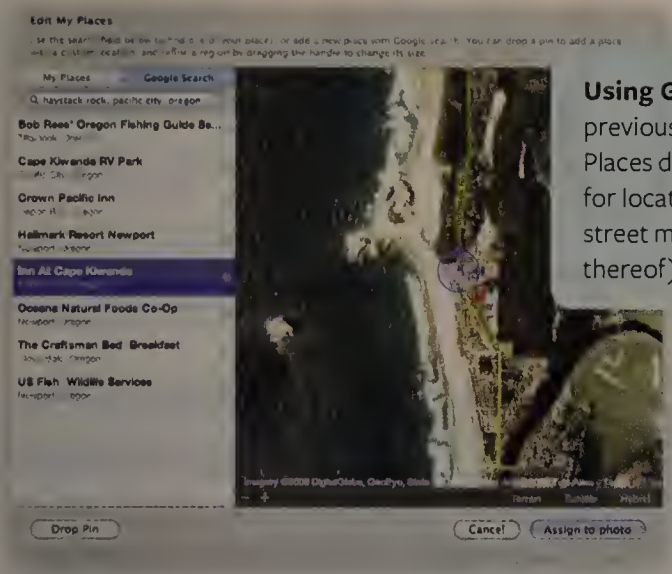
iPHOTO '09

4 mice

PROS Faces and Places make it easier to categorize your photos; solid Facebook and Flickr integration for sharing photos; subtle but good editing enhancements.

CONS Faces and Places could be easier to use; no Effects improvements; no AppleScript or Automator support for Faces or Places; minor bugs.

OS COMPATIBILITY: 10.5 (Leopard)
PROCESSOR COMPATIBILITY: Universal
PRICE: $79 as part of iLife suite; free with new Macs
COMPANY: Apple, www.apple.com
FULL REVIEW: macworld.com/4319



Using Google Maps You assign a place to a previously untagged image through the My Places dialog box, which uses Google to search for location information. It displays either a street map or a satellite photo (or a hybrid thereof) of the location in question.

photos, and you can drill down through Places' column browser to see which photos were taken where. iPhoto uses some reverse geocoding functionality, which places your photos contextually in a broader "area, city, state, country" scheme, rather than the standard "longitude, latitude" scheme of many GPS devices. So iPhoto smartly identifies all the photos I've taken in Portland, Oregon, for example, even if I haven't tagged them.

As neat as all this is, there are a couple of areas where Places feels half-baked: there is no undo function if you are changing a location; and as good as the My Places dialog box is, it would be better if it allowed you to copy and paste location data from one photo to another.

Sharing

iPhoto '08 introduced a slick Web photo gallery feature; however, to share your pictures, you had to be a paying .Mac member (.Mac is now MobileMe [4½; macworld.com/3774]). Apple has also added the ability to post directly to the Facebook and Flickr Web services.

Once the uploading process is complete, you can view and edit the photos on the service, assigning tags and adding or deleting images to or from the gallery; and iPhoto will synchronize all the changes you make, including downloading new images or deleting images, although they get deleted only from the gallery, not your library.

Because Facebook also has a face-tagging mechanism, the names you've added via the Faces feature will show up on Facebook. If the e-mail addresses of your tagged friends match the e-mail addresses they use for Facebook, then they will receive a notification that they're in your posted photos. Similarly, people can tag unnamed people in your images, and those tags will automatically synchronize with your iPhoto Facebook galleries.

Editing Enhancements

Apple has made some minor enhancements to iPhoto's editing features. The company has pulled a few tools from Aperture (4; macworld.com/3445), such as the Vibrancy and Definition controls. The latter adjusts contrast in a more refined way than the Contrast slider. The Vibrancy-like effect adjusts saturation but minimizes the effect on skin tones.

Also in the editing mode are Aperture-influenced improvements to the existing Shadow and Highlight controls. The Retouch brush also has better edge detection for more realistic touch-ups.

Some Rough Edges

While iPhoto largely shines, it still has a few weak points. The Effects pane remains underpowered. The black-and-white conversions are limited, and the Vignette and Matte tools still create heavy-handed, overdone results.

Also, people hoping to integrate Faces and Places into AppleScript or Automator workflows will be disappointed to discover that Apple inexplicably omitted support for those features in this version.

Macworld's Buying Advice

By focusing on the people and places in our photos—and the way we share those images—Apple has made it easier with iPhoto '09 to categorize, search for, and share our pictures. We'd like to see some of the program's new features more streamlined and automated, but this latest version is a solid step forward.

Rick LePage is a former *Macworld* editor. He now runs the photo-printer site Printerville (www.printerville.net).

As I added photos to my library, iPhoto '09 got increasingly better at recognizing the most important people in my pictures.

Familiar Face As you add more photos of your friends and family to iPhoto '09, the chances of getting good matches increase. In this screen, I could click on each individual picture to confirm a match. But they're all correct matches, so I can just drag a marquee around all the images to confirm them and then click on the Done button at the bottom of the screen.

iMovie '09

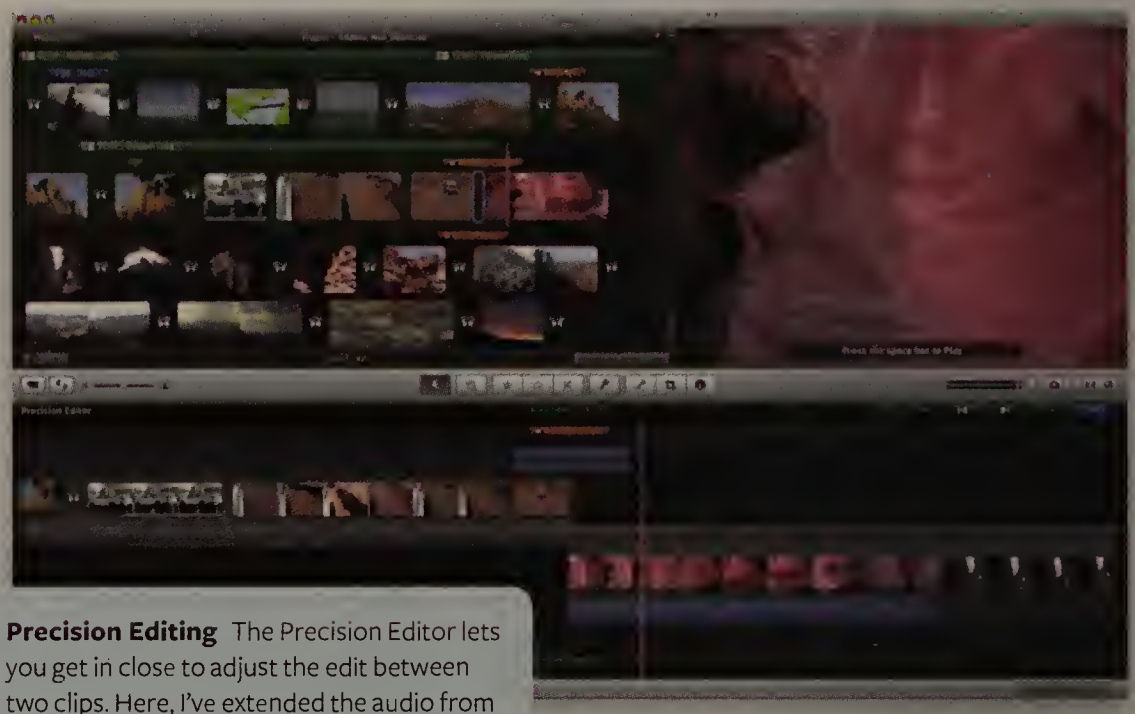
Apple's revamped video editor surpasses previous versions **BY JEFF CARLSON**

When Apple decided a year and a half ago to start from scratch and introduce a new video editor for iLife, the version it shipped should have been more like iMovie '09.

Instead, the company released iMovie '08 (3½; macworld.com/3097), a rough draft of what Apple believed a consumer video editor should be. It offered several welcome feature improvements, especially for people new to video editing who were looking for an "iPhoto for movies" application. However, for users who were already familiar with previous versions of iMovie, those advances were easily overshadowed by the program's disparity with the mature iMovie HD 6 (4; macworld.com/1737). iMovie '08 lacked many features that had augmented iMovie HD's generous stable over the years.

A few of those capabilities have returned. iMovie '09 can slow down or speed up clips; can export directly to iDVD, with support for chapter markers; can easily extract audio from video clips for editing separately; and provides a way to make cutaway shots. Themes have also reappeared, and they're better now.

Other capabilities, alas, are still missing. Precise audio editing is hampered by the inability to vary volume levels within a clip. There's no way to write video back to tape in a MiniDV camera. And third-party plug-in support remains only a fond recollection.



Precision Editing The Precision Editor lets you get in close to adjust the edit between two clips. Here, I've extended the audio from the previous clip, at top, so that it plays over the image of the next clip, at bottom.

However, Apple has crammed enough new features and thoughtful improvements into this version that it seems to have been rebuilt from scratch again.

Library Management

iMovie '09 improves on housekeeping by letting you choose where to store project files; they don't all need to reside on your Mac's internal disk.

In the redesigned Project Library pane, you can relocate projects by dragging them to a different volume. The pane now provides a filmstrip representation of each project that you can skim, play back, or export without actually opening it for editing.

Apple has also addressed one of the problems inherent in the emerging era of post-tape shooting. If you don't have time to import the footage from your filled-up tapeless camcorder, or if you want to make a backup of your master files, you can use the new archive feature to copy the raw video files to a hard disk or another volume. You can then import (and transcode) the archived footage at your leisure.

Steady Hand

One of the biggest surprises in home video has been the success of Pure Digital's Flip camcorders (3½; macworld.com/4222), which offer no zoom and no built-in image stabilization to offset the camera shake that occurs when you shoot handheld video. iMovie's

iMOVIE '09

4

PROS Image stabilization; better control with Precision Editor; return of slow motion and iDVD integration; lets you archive tapeless source video without transcoding.

CONS Still no precise audio editing; no support for writing back to tape; no third-party plug-in support; single-field processing for interlaced video.

OS COMPATIBILITY: 10.5 (Leopard)
PROCESSOR COMPATIBILITY: Universal
PRICE: $79 as part of iLife suite; free with new Macs
COMPANY: Apple, www.apple.com
FULL REVIEW: macworld.com/4407

SCOSCHE®

compostie audio/video cable for iPod® & iPhone™

introducing the:

showTIME™

IPAV

- Scosche's **showTIME**™ is a composite audio/video output solution for all iPod and iPhone models that support video, including the iPhone 3G, iPod nano (Gen 4), iPod classic, iPod touch (Gen 1), iPod nano (Gen 3), and iPod with video (Gen 5)

- easily connect your iPod or iPhone directly to the RCA audio/video inputs on any television or display

- tapered metal RCA barrels allows for better connection with no signal loss

- 6 foot cable length

MacLife RATED AWESOME

The **showTIME**™ *is good for the TV, the stereo, or even the car"*
-- MacLife Magazine

SCOSCHE.com

Made for iPod

Works with iPhone

[illegible] and "Works with [illegible] for the operation of the [illegible] or its comp[illegible]

new image-stabilization feature seems designed just for this market.

iMovie '09 can analyze footage either at import or on a clip-by-clip basis later. My results were mixed, but generally favorable. Don't expect Steadicam results, especially if your footage is highly caffeinated. In those cases, iMovie marks the clip with a wavy red line to indicate that the shakiness is irreparable. For clips that suffer from just a little motion, the feature works well.

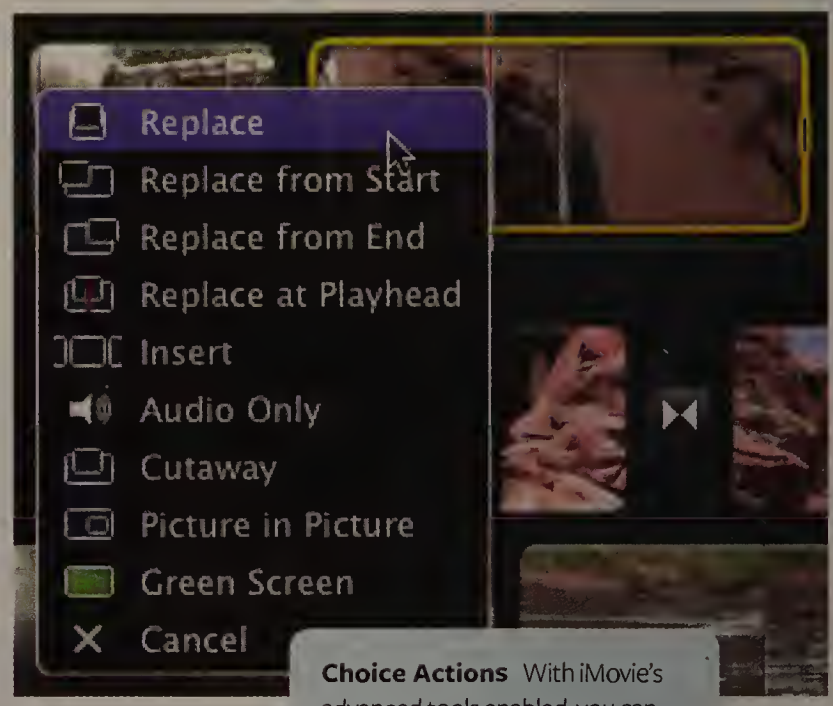
What I like about iMovie's image stabilization is its implementation. Analyzed clips are not re-rendered; instead, iMovie keeps track of how much zoom and rotation is applied to every frame in order to minimize the amount of movement. That enables you to use a slider control to regulate the amount of shake that's suppressed.

Surgical Strikes

The new version's Precision Editor is a magnifying glass that enables specific frame-by-frame editing. The controls are not as intuitive as I'd expect, particularly when you're dragging audio offsets. But once you understand the way the Precision Editor operates, using it gets easier.

press time, however, the company was investigating numerous reports of interlace artifacts, particularly with 1080i footage. Other HD video (such as AVCHD) is converted to Apple Intermediate Codec (AIC) at 30p (30 frames per second, progressive) for NTSC, or 25p for PAL.

Most people won't notice any quality issues and will appreciate the ability to make edits faster.



Choice Actions With iMovie's advanced tools enabled, you can drag a clip onto another clip to gain access to several useful actions.

And More

The number of new features in iMovie '09 is satisfyingly abundant. I found that the following additions stood out from the rest, worked as advertised, and were easy to use.

Picture-in-Picture iMovie '09 supports more than one video track, as well as multiple audio tracks. The picture-in-picture feature places a video track on top of the existing filmstrip in the Project Editor; in the monitor, you can resize and reposition the overlaid clip.

Green Screen For simple special effects, iMovie can knock out a green background (create a mask) and substitute other footage in its place. Although the masks iMovie creates aren't as precise as what you'd get with professional-level video software, the feature works well.

Maps and Backgrounds iMovie offers four globe styles and four flat maps onto which you can project a moving line that zips from city to city. Also available are a number of decorated backgrounds you can add text to, use as filler, or set as a backdrop for picture-in-picture or green screen scenes.

Themes Although only a handful of themes are available, they strike me as being more polished than those in iMovie HD.

Edit to Music To use this feature, you create a new blank project, add a song as a background music track, and open the track in the Clip Trimmer. You then play the song and press the M key wherever you hear a beat (or where you want a visual edit to occur). When you add clips or photos to the project, their durations match up to the beat markers.

iMovie '09 lets you choose where to store project files; they don't all need to reside on your Mac's internal disk.

Performance and Image Quality

The way iMovie '09 handles video internally is mostly unchanged from that of the previous version: interlaced DV and HDV footage use single-field processing to improve performance, which means iMovie throws out every other horizontal line of information.

Apple has deliberately made a trade-off between performance and image quality for some footage. If you need the best image quality, consider editing in either Final Cut Express (★★★★; macworld.com/3315) or Final Cut Pro (★★★★½; macworld.com/2903).

According to Apple, the interlaced footage processing has been improved; at

Macworld's Buying Advice

iMovie '09 has caught up with iMovie HD and surpassed it in features and performance (except in the areas of highest-quality HD, audio-editing tools, and support for writing video to tape). There are enough improvements in iMovie '09 that it now competes more with Final Cut Express—the next step up in Apple's video-editing repertoire—than with iMovie HD 6. If iMovie is the most enticing app in the iLife suite for you, you'll appreciate the enhancements in iMovie '09.

Jeff Carlson is the author of the forthcoming *iMovie '09 and iDVD: Visual QuickStart Guide* (Peachpit Press).

Enter to WIN a Back-UPS® ES 750G.

(A $99 value!)

www.apc.com/promo **Key Code** h474w

(888) 289-APCC x8165 • FAX: (401) 788-2797

Name: _____ Title: _____

Company: _____

Address: _____ Address 2: _____

City/Town: _____ State: _____ Zip Code: _____ Country: _____

Phone: _____ Fax: _____

e-mail: _____

☐ ***Yes! Send me more information via e-mail and sign me up for APC Powernews® e-mail newsletter. Key Code: h474w***

What type of availability solution do you need? ☐UPS: 0–16kVA (Single-phase) ☐ UPS: 10–80kVA (3-phase AC) ☐ UPS: 80+ kVA (3-phase AC) ☐ DC Power ☐ Networking Enclosures and Racks ☐ Air Conditioning ☐ Monitoring and Management ☐ Cables/Wires ☐ Line Conditioning ☐ Mobile Protection ☐ Surge Protection ☐ UPS Upgrade ☐ Don't Know

Purchase timeframe? ☐ <1 Month ☐ 1–3 Months ☐ 3–12 Months ☐ 1 Year Plus ☐ Don't Know

You are (check 1) ☐ Home/Home Office ☐ Business (<1000 employees) ☐ Large Corp. (>1000 employees) ☐ Gov't, Education, Public Org. ☐ APC Sellers and Partners

APC
Legendary Reliability®

©2009 American Power Conversion Corporation. All trademarks are owned by Schneider Electric Industries S.A.S., American Power Conversion Corporation or their affiliated companies.
e-mail: esupport@apc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA • 998-0973_BRC

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT # 36 WEST KINGSTON RI

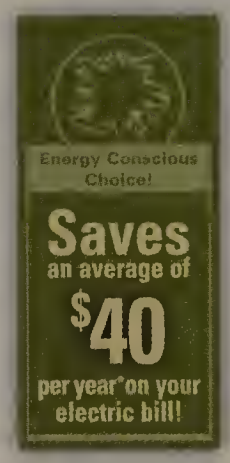
POSTAGE WILL BE PAID BY ADDRESSEE

APC

ATTENTION CRC: h474w
132 FAIRGROUNDS RD
PO BOX 278
WEST KINGSTON RI 02892-9920

Protects your computer, the environment, and your wallet.

APC Back-UPS BE750G with SmartShedding™ Technology automatically powers down idle peripherals to save energy and money.



Get the most energy efficient desktop battery backup yet.

Let's protect what's important

What's in your computer? Photos, music, personal files, financial data, broadband access, videos, and more. Your computer has never been more important, and yet it has never been at higher risk for damaging power surges and other disturbances.

So like most people, you need to protect your assets. But like most people, you'd also like to protect the environment. With our new energy conscious products, you can do both. Energy efficient by design, our new smart products protect the power going in your computer, at a cost that is quickly offset by big energy savings. How? Not only do the new Back-UPS ES® and SurgeArrest® use power very wisely, they also boast a master/controlled outlets feature, which automatically powers down idle devices to conserve energy.

APC power protection products are available at:

BEST BUY · CDW · STAPLES that was easy · Office DEPOT

"The pricetag on the new UPS is $99. While I'm not in the habit of endorsing products in this blog, if you're in the market for a workstation-class UPS, why not opt for the greener option?"

- Heather Clancy, ZDNet.com

In fact, while protecting your power supply, we're up to 5 times more energy efficient than any other solution. By saving you $40 a year in energy costs, our Back-UPS ES pays for itself in 2 short years. The high frequency, low copper design has a smaller transformer and environmental footprint. Even the packaging has been carefully selected and manufactured to maximize use of recycled materials and minimize waste.

In this world, every decision you make counts. So protect your power with a battery backup that works to protect the environment. It conserves power, it pays for itself, and it's backed by APC's 20-plus years of Legendary Reliability®. For more information on this or our other great products, or for information about environmentally responsible disposal of your old battery, visit ***www.apc.com***

Energy efficient solutions for every level of protection

Save $25 per year* on your electric bill!

Surge Protection

Starting at $34

Guaranteed protection from surges, spikes, and lightning.

7 outlets, Phone/Fax/Modem Protection, Master/Controlled Outlets

SurgeArrest® P7GT

Save $40 per year* on your electric bill!

Battery Back-UPS®

Starting at $99

Our most energy efficient backup for home computers.

10 outlets, DSL and Coax protection, Master/Controlled Outlets, High Frequency Design, 70 minutes of runtime†

Back-UPS® ES 750G

APC can help with your other power protection needs. Visit apc.com to see our complete line of innovative products.

Enter to Win a Back-UPS® ES 750G! (A $99 value)

Also, enter key code to view other special offers and discounts.

Visit www.apc.com/promo Key Code h474w or Call 888.289.APCC x8165 or Fax 401.788.2797

APC Legendary Reliability®

© 2009 American Power Conversion Corporation. All trademarks are owned by Schneider Electric Industries S.A.S., American Power Conversion Corporation, or their affiliated companies.

e-mail esupport@apc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA • 998-0969 †Runtimes may vary depending on load.

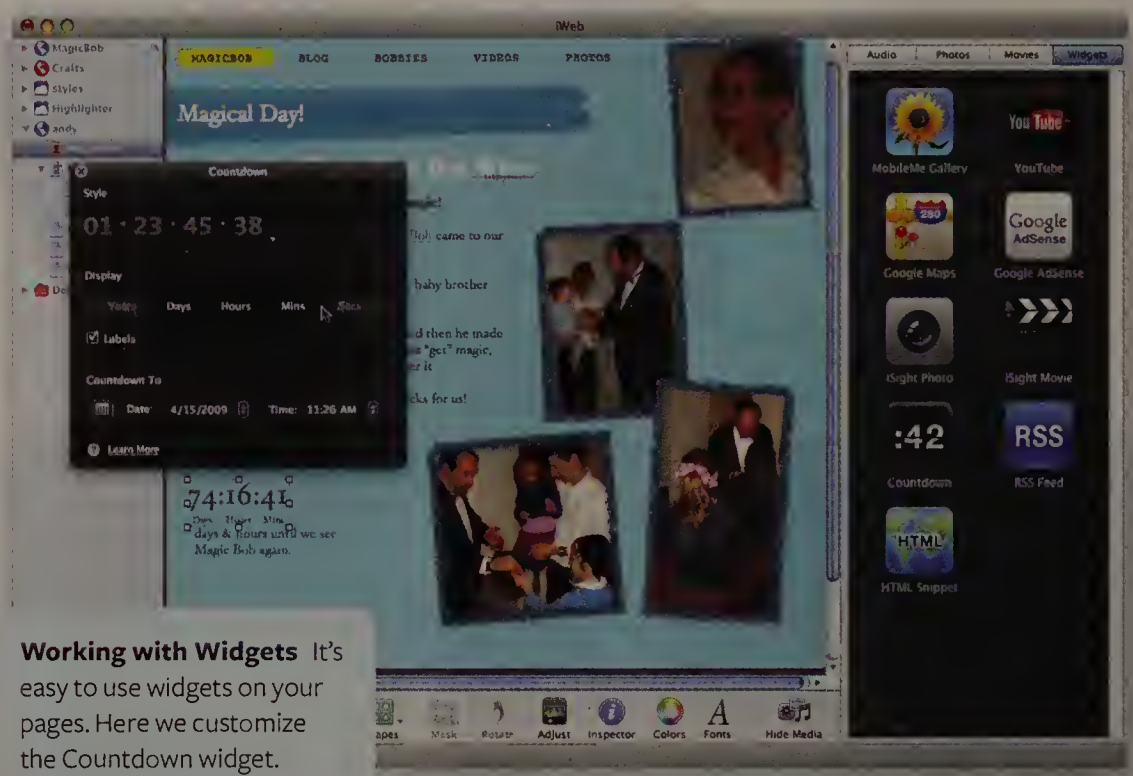
*Average savings are based on comparable competitive models, and are comprised of two energy saving features: an ultra efficient electrical design, and the master/controlled outlets feature

iWeb '09

FTP uploading, new widgets boost iLife's Web builder

BY DEBORAH SHADOVITZ

Apple's goal with iWeb is to give users an easy way to create and update lively, personal Web sites without needing to know complex Web building technologies. With the addition of FTP capabilities and some powerful new widgets, iWeb '09 ably accomplishes that mission.



Working with Widgets It's easy to use widgets on your pages. Here we customize the Countdown widget.

Interface Updates

In this version of iWeb, the methodology of designing a gorgeous site remains unchanged. All design work takes place within one window, accompanied by four palettes: Inspector, Fonts, Colors, and Adjust. The Media Browser, which lets you access your images, music, and videos, is now a drawer, and a Show/Hide Media button appears in the toolbar. I had hoped for iPhoto ratings and larger image previews in this version, but the Media Browser's functions have not changed.

Also new to the toolbar are the Add Page (replacing the plus sign), Publish Site, and Visit buttons. Gone are the Web Widgets and the Forward and Backward buttons.

Wondrous Widgets

New widgets present additional exciting options. In the Media Browser's new Widgets tab, you'll find nine widgets. New are YouTube, iSight Photo, iSight Movie, Countdown, and RSS Feed. MobileMe Gallery, Google Maps, Google AdSense, and HTML Snippet have moved to here from the toolbar.

After copying a URL from YouTube, just drag the YouTube widget onto your page and paste that URL into the settings. The video plays right in iWeb if you're online. Then resize it, move it, or jazz it up with a frame or a border.

Adding a new iSight video or photo, a live date countdown, or a Really Simple Syndication (RSS) feed is similarly easy. Drag an iSight widget onto your page and click on the camera icon. Then resize and reposition the image.

Countdown adds a live date countdown, optionally showing years, days, hours, minutes, and seconds. Once dragged to your page, its settings appear for you to tweak. With the powerful RSS widget, your Web page can display any RSS feed. Disappointingly, iWeb still lacks an e-mail-masking widget to shield your address from spammers.

Publishing

Perhaps the most significant upgrades to iWeb are its uploading features: built-in FTP and individual-site uploading. Until now, you could directly upload to MobileMe only. To publish to your own server, you had to publish to a folder and then use a third-party FTP program to upload.

With iWeb '09 you can publish sites anywhere. If you have a MobileMe account, you can upload multiple sites there. If you have a domain and hosting, you can send any iWeb site directly there, and you can still export to a folder. iWeb

4½

PROS Easy to use; builds exciting pages; simple publishing via FTP; great new widgets; easy to update.

CONS Templates limit design flexibility; no e-mail masking; inappropriate for some professional sites.

OS COMPATIBILITY: 10.5 (Leopard)
PROCESSOR COMPATIBILITY: Universal
PRICE: $79 as part of iLife suite; free with new Macs
COMPANY: Apple, www.apple.com
FULL REVIEW: macworld.com/4408

'09 also makes updating your published site more intuitive with the File menu's new Publish Site Changes command.

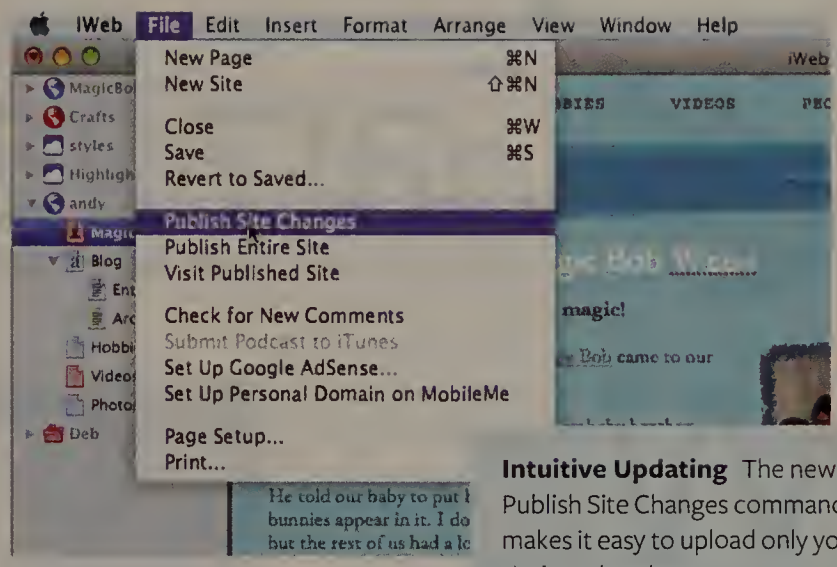
If you have your own domain, you won't love iWeb's method of publishing both your site folder and your site pages. This lengthens your URLs and creates index.html redirects.

If you use Personal Domain with MobileMe and are publishing multiple sites, you'll need to skip iWeb's Visit button and instead enter the domain name, a backslash, and the site's name into your browser's address window to view each subsequent site. Hosting on MobileMe's iDisk still offers advantages: blog and photo comments can be enabled if your site is hosted there.

Finally, iWeb can now automatically announce your site's updates to your Facebook Wall.

Pro Sites

If you're building a business or professional site, you may want to opt for more broad-ranging software—and you'll need to host your site on a commercial server (MobileMe is strictly for non-commercial use). Among other things, iWeb's HTML is not optimized for Web searches: the title tag is limited to text on the page, and the pages lack heading, meta, and alt tags. And, since iWeb's menus are JavaScript-based, search engines can't crawl them.



Intuitive Updating The new Publish Site Changes command makes it easy to upload only your site's updated pages.

Macworld's Buying Advice

iWeb '09 is an excellent program for building a personal Web site to share stories, photos, home movies, videos, podcasts, and blogs. Its improved uploading capabilities, easy-to-use widgets, and more straightforward interface are worth the price of the upgrade. While it's not designed for professionals, iWeb can still be a wonderful way to start your business's Web presence.

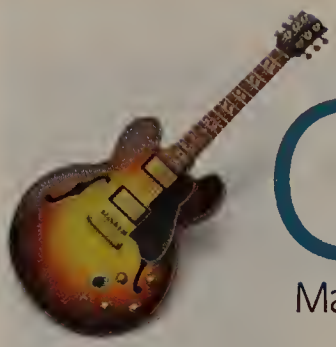
Deborah Shadovitz has been a Web designer writing about the Web since 1996.

MacMania 9

www.InSightCruises.com/Mac9

Post-Cruise Option 1:
BEIJING, CHINA • Friday, July 17–20
This three-night mini-Beijing tour hits just about all the major tourist spots in and around Beijing: The Great Wall; Temple of Heaven; Open-Air Market; Tian'anmen Square; and Forbidden City. INCLUDED: Nine meals; three nights at a five-star Beijing hotel; bilingual tour guides; all land transportation and entrance fees; and all taxes. $1,950 per person, based on double occupancy.

CO-PRODUCED BY:
Insight Cruises
THE JOURNEY WITHIN
Macworld
CST# 2065380-40



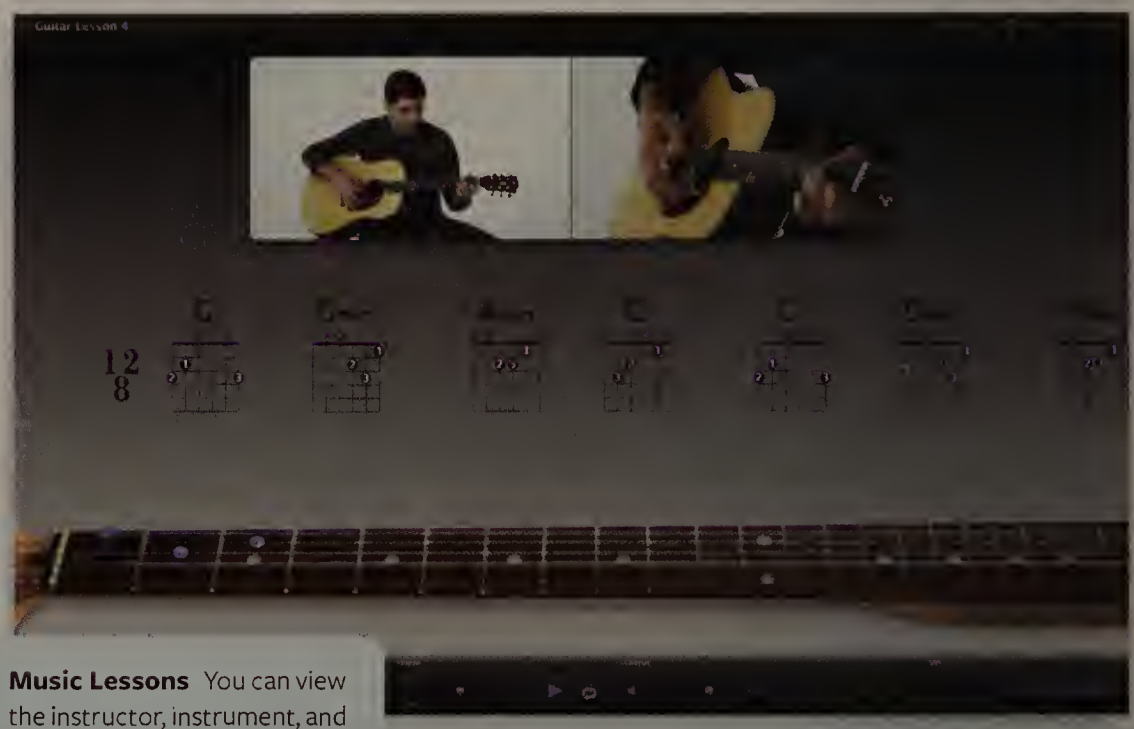
GarageBand '09

Make and learn music with Apple's audio app

BY CHRISTOPHER BREEN

With each new version of GarageBand, Apple tries to explore a different angle, hoping to capture a new audience. With GarageBand '09, the new lure is guitar and piano lessons.

Veteran GarageBand users aren't left out of the mix. Guitar players can now play through five newly modeled amplifiers and a host of stomp-box audio effects. And Magic GarageBand now lets you record what you play with the virtual band. Plus, a redesigned interface makes existing features easier to find.



Music Lessons You can view the instructor, instrument, and music in a variety of ways.

Lessons Learned

The marquee feature of GarageBand '09 is Learn To Play, the application's basic and artist piano and guitar video lessons. GarageBand '09 includes the first basic guitar and piano lessons. You can download eight additional free lessons for each instrument. Artist lessons cost $4.99 each. Unfortunately, these lessons work only on Intel Macs with a dual-core processor.

Each basic guitar and piano lesson is taught by "Tim," an approachable instructor who begins with the physical layout of each instrument and, in later lessons, walks through the basics of playing the instruments, including instruction on fingering, chords, and rhythm. Each lesson includes a Play section that allows you to play along with the teacher (and record what you play). The lessons are nicely produced and well paced, and they allow you to see the instructor's hands, a virtual keyboard or fretboard, and notation.

GarageBand's approach to teaching piano and guitar is intriguing—providing enough information to have you playing a song quickly. Learn To Play, though not deep, is a good starting point.

Rock On

In previous versions of GarageBand, you could play real instruments through the program's amplifier simulations and apply effects to the instruments. But those features weren't easy to find. In GarageBand '09, Apple not only has brought these guitar features to the fore, but has also completely rebuilt the amps and effects.

You'll find these features in the new Electric Guitar tracks—real-instrument tracks that place one of five amp models front and center. You can easily change amps and adjust the settings of each one—the amps have knobs for adjusting Gain, Bass, Mids, Treble, Presence, Master, Output, Reverb, and more. You can also edit the amp's master echo and reverb settings, which sound quite authentic.

Electric Guitar tracks use realistic stomp-box effects—modeled after the small effects boxes that routinely litter the floor around electric guitar players.

One crucial omission: like much of the rest of GarageBand, amps and stomp boxes can't be controlled via MIDI, and that's a shame. Guitar players like to kick in effects as they play, and the only way

GARAGEBAND '09

4½

PROS Well-presented lessons; intuitive guitar amps and stomp boxes that sound good; recording support for Magic GarageBand; useful interface reorganization.

CONS No MIDI control of stomp boxes; can't have more than one GarageBand project open at a time; no improvement in notation printing.

OS COMPATIBILITY: 10.5 (Leopard)
PROCESSOR COMPATIBILITY: Universal
PRICE: $79 as part of iLife suite; free with new Macs
COMPANY: Apple, www.apple.com
FULL REVIEW: macworld.com/4409

Going Electric The new Electric Guitar tracks support modeled amps and stomp-box effects that sound like the real deal.

to do that in GarageBand '09 is to take your hand off the guitar and click a stomp box's virtual buttons. You can control parameters for effects after the fact, using GarageBand's automation controls, but it's not the same thing.

More Advances

Magic GarageBand has some needed improvements. While the band is still limited to the same nine songs as before, you can now record what you play and then export that recording as a multitrack project. You can also shuffle the backing instruments by clicking anywhere other than on an instrument. And you can now mix the levels of each instrument and quickly mute or solo each one with the click of a button. Also, you can choose any software instrument sound you like as your instrument when playing through a MIDI keyboard.

Apple has rejiggered the look of GarageBand to give it the same gray background color as Apple's Aperture and Logic (★★★★½; macworld.com/3180). The New Project window contains a broader variety of projects.

When you add a new track, you see a redesigned window that lets you easily choose a Software Instrument, Real Instrument, or Electric Guitar track. Loops are now found on the side of the main window, and Effects are now available from a clearly visible Edit tab in the Info pane. And text is larger everywhere.

Macworld's Buying Advice

GarageBand '09's new and upgraded features will likely entice more people—specifically, folks looking to get some use from that guitar or keyboard crammed in their closet, or electric guitar players seeking a more authentic sound—to give this multitalented app a good look.

Senior Editor **Christopher Breen** is a professional musician and the host of the Macworld Podcast.

Your iPhone* Idea to Ca$h Flow in 3 Steps

1 Bring your iPhone application idea to Zco
2 Zco develops, deploys** & supports your app
3 Sit back and collect monthly checks

CMMI
Certified Global Facilities

ur 2$ 3

Zco
20 years of providing high quality service
www.zco.com 603.881.9200

*We custom develop Windows, Mac, iPhone, Blackberry and Android software
**Zco will place your app in Apple's App store and provide customer support

NOW SHIPPING 3.0 NOW SHIPPING

Needs NoteBook. Has NoteBook.

Stickies, scraps of paper, web clippings, meeting notes, reminders — take control of it all with Circus Ponies NoteBook, the award-winning application for managing information. Get organized using a familiar notebook interface, with pages and tabs, sections and subsections. "Clip" web research, e-mails and other content to your Notebooks for later reference. Create voice-annotated notes and review them from your computer or iPod. Diagram and sketch when words won't suffice. Find anything instantly using NoteBook's patented Multidex™. Share your Notebooks as PDFs or as websites. And much more. NoteBook has everything you need to get organized.

Download NoteBook right now and try it for yourself, **FREE** for 30 days.

www.circusponies.com/trialmw

CIRCUS PONIES™

NoteBook

© 2009 Circus Ponies Software, Inc. All rights reserved. Circus Ponies, NoteBook, the NoteBook logo, and Multidex are trademarks of Circus Ponies Software, Inc. All other trademarks are the property of their respective owners.

ACADEMIC SUPERSTORE™ Apple Store amazon.com MICRO CENTER Office DEPOT Small Dog Electronics TEKSERV

How GREEN Is Your Mac?

Apple's environmental report card and our guide to energy-efficient computing

A couple of years ago, Greenpeace (www.greenpeace.org) made headlines by accusing Apple of all kinds of environmental malfeasance. It was a heavy blow for the image-conscious company—one that didn't go unanswered. Apple now has an entire advertising campaign that touts how green its products are.

But is that just marketing blather? Or has Apple really cleaned up its act? And more important, are you computing with the smallest environmental footprint possible? In this article, we'll help you answer these questions—with a report on Apple's environmental record, tips on saving electricity (and money) while you use your Mac, and advice on responsibly disposing of your outdated gear.

ILLUSTRATION BY GINA + MATT

The World's Greenest Computers?

Are Macs as environmentally friendly as Apple says? By Jeff Bertolucci

When Apple launched its new family of MacBook laptops last fall, its ad campaign focused on their eco-friendly attributes: a recyclable aluminum and glass enclosure, mercury-free LED backlights, fewer toxins than other computers, and a power-stingy design. A TV ad by Apple dubbed the new MacBooks "the world's greenest family of notebooks."

But are Apple's notebooks—or its other products and its corporate policies—more environmentally friendly than those of its competitors? To find out, we examined Apple's product chain, from materials and manufacturing to distribution and recycling. We also talked to environmental and industry groups.

The one thing we didn't do is talk to Apple directly. The company wouldn't comment for this story, directing us instead to summaries of its environmental efforts (www.apple.com/environment). While that information is good, it isn't complete, and that's a problem. Apple's efforts to reduce its products' environmental impact appear to be for real, but the company makes it hard to know for sure.

The Supply Chain

One reason it's hard to check the environmental friendliness of Apple's products is that Apple doesn't actually manufacture them. In the case of notebooks, for example, original equipment manufacturers (OEMs) like Apple, Dell, and Hewlett-Packard (HP) design their systems but then outsource the assembly to contract manufacturers—also known as original design manufacturers (ODMs). While most of these ODMs have headquarters in Taiwan, their factories are usually in mainland China, where labor costs are lower and environmental standards are lax.

According to IDC research analyst David Daoud, 95 percent of all laptops are manufactured in China, most of them by companies you've likely never heard of, including Quanta Computer, Compal Electronics, and Inventec. Most of the companies that supply these ODMs with materials and components are also based in Asia.

Apple's Supplier Code of Conduct requires that its partners use "environmentally responsible manufacturing processes." But how do Apple and other OEMs really know that contract manufacturers and their suppliers meet such requirements? How does an OEM know, for example, that the internal cables in its laptops are truly free of polyvinyl chloride (PVC), or that there's no arsenic in the display glass?

"These companies understand the potential negative PR for them" if they're caught lying about their environmental policies, according to Greenpeace electronics and e-waste expert Casey

PHOTOGRAPHY BY PETER BELANGER; ILLUSTRATION BY GINA + MATT

Harrell. He says that both OEMs and contract manufacturers spot-check parts and processes along their supply chains, to make sure everything is in order. Global agencies like the European Union and Greenpeace do their own spot-checks, too, but not many. "It's very expensive to take apart a computer and do extensive testing on it," Harrell says.

Out, Dangerous Chemicals

So on a lot of this stuff, we just have to trust Apple. Apple's self-reporting is largely positive, but observers say it's also honest.

In its environmental reports on its new notebooks, Apple says that those computers are free of PVC. When created or burned, PVC releases dioxins, which can cause cancer and can damage immune and reproductive systems. And PVC is often mixed with toxic chemicals that can evaporate—also known as "off-gassing."

Apple's notebooks are also now free of brominated flame retardants (BFRs), which are often added to plastics used in electronics and other products. BFRs, which can harm hormone and immune systems, pose the greatest risk when electronic devices containing them are produced or destroyed. That's a problem when open piles of e-waste are burned, a practice that's becoming common in developing countries in Asia and Africa. Some studies, including one by the Australian government, have found BFRs in the dust that collects on home electronics devices.

Apple has significantly reduced the PVC and BFR content of iMacs and iPods, too. Furthermore, Apple reports that the displays in the MacBook, MacBook Pro, and MacBook Air are free of mercury and arsenic.

The company is making its iPods and iPhones greener too: the headphones, USB cord, and internal wiring of the iPhone 3G, for example, are all PVC-free. And Apple has reduced the size of its packaging (much of which is made from recycled material) across all its product lines.

Where the E-waste Goes

It's clear that the real environmental hazards of consumer electronics come not from using them but from disposing of them. As Jim Puckett, the founder of the toxic waste watchdog group Basel Action Network (BAN; ban.org) puts it, "The most benign part of a product's lifecycle is when it's sitting on your desk. That happens in rich countries. The dirtier parts of the lifecycle—the production and the waste—happen in developing countries."

Apple's recycling program, which operates in 95 percent of the countries it does business in, takes back old computers, monitors, printers, and other e-waste at no charge (for more on this, see "Responsible Recycling").

Many companies ship their e-waste overseas. Apple says that it doesn't. Its policy reads, "No waste from Apple's U.S. recycling program is shipped outside North America. All recovered materials are processed domestically, with the exception of some commodity materials that can be recycled for future use."

But some people think that the bit about "commodity materials" gives Apple a loophole. Puckett is one of them: BAN is trying to pressure Apple and other companies not to export hazardous e-waste to developing countries, either directly or through third-party recyclers. At press time, of the major tech companies BAN is targeting, only Sony had signed the organization's Manufacturer's Commitment; Apple, as well as Dell and others, had not.

When it comes to recycling, Apple and other manufacturers are tight-lipped. "Most companies have not been very straightforward about who's in their recycling chain, and what they actually do with the material" says Sheila Davis, the executive director of the Silicon Valley Toxics Coalition (SVTC; www.etoxics.org), which has been tracking the electronics industry since 1982.

This lack of transparency makes it difficult for watchdog groups to assess Apple's e-waste operation. "If they could tell us which recyclers they use," says Puckett, "then we could find out where the [e-waste] is going."

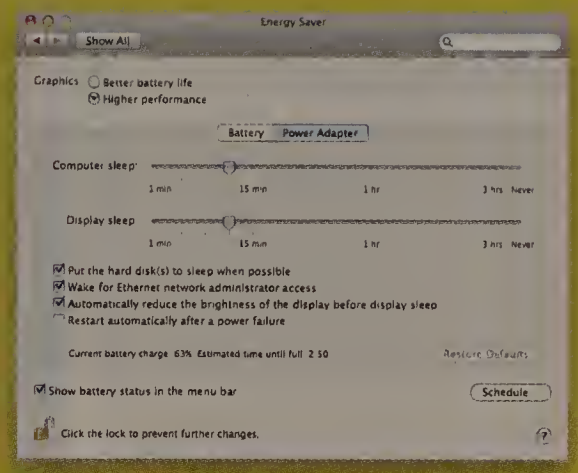
Greenhouse Cleaning

Beyond the presence of toxic materials in Apple's product stream, there's the environmental issue of greenhouse gases and global warming.

Buy a Laptop

If energy conservation is your top priority, your next computer should be a laptop. Notebooks are by nature stingy with energy because they're designed to run off a battery for hours. The MacBook Air consumes just 13 watts when idling with the monitor on; that's less than some compact fluorescent light bulbs. (For more on energy consumption, see "The Power Office.")

The MacBook Pro takes hardware efficiency further by offering two graphics processors. For heavy graphics lifting, you can choose the nVidia GeForce 9600M (which requires more juice); but for everyday tasks, stick with the default nVidia GeForce 9400M (which uses less power). To make the choice, go to System Preferences: Energy Saver and, under Graphics, choose Better Battery Life (for the 9400M) or Higher Performance (for the 9600M).



Choose Your Chip If you have one of Apple's newest MacBook Pros, you can choose between two graphics chips; one saves energy while one maximizes graphics power.

Energy Saver and Beyond

All new Macs ship with OS X's Energy Saver feature turned on. According to Apple, a Mac uses about 77 percent less energy in this low-power mode than when it's running at full power. You can save even more by customizing Energy Saver in System Preferences, and you can save still more with some help from third-party energy utilities.

Faronics' $14 **Power Save Mac** (www.faronics.com) analyzes your computer use to determine when the Mac can take advantage of downtime to reduce power consumption. It's specially designed for networks; the savings from multiple machines can add up.

Dragon Systems' $29 **Power Manager 3** (www.dssw.co.uk) saves energy by automatically turning your computer off when you're not using it, and then starting it back up when you need it. Energy Saver has a function for this, but Power Manager offers greater flexibility and more off and on times. Dragon also makes a free widget called Energy Schedule, which you can use to see upcoming shutdowns and restarts—even if you don't use Power Manager.

Power Save Mac Faronics' Power Save Mac preference pane lets you define inactivity much more specifically than you can in OS X's built-in Energy Saver.

"Most companies have not been straightforward about who's in their recycling chain, and what they actually do with the material."
—**Sheila Davis**

Apple's Web site provides detailed reports of greenhouse-gas emissions created at each stage of its products' lifecycles, including manufacturing, transportation, consumer usage, and recycling. However, it provides scant details on emissions from its overall operations. The Apple 2008 Environmental Update from Steve Jobs explains why. "Most companies are focused on the emissions produced by their offices or perhaps their factories, but we have found that this accounts for just a small fraction—less than 5 percent—of the greenhouse gases associated with consumer electronics."

That attitude doesn't sit well with watchdog groups like Ceres (www.ceres.org), a coalition of environmentalists and investors that urges companies to adopt greener practices. In a recent report that rated companies' climate-change strategies, Ceres gave Apple a poor 28 on a 100-point scale. By comparison, Dell earned a 77; HP, a 62.

This Ceres report acknowledges Apple's efforts to remove toxic chemicals from its products, but knocks the company for not releasing more details about its business's carbon footprint. The companies that scored highest in the study were those "that choose to make public an overall emissions footprint for their operation," says Ceres research analyst Megan Good. "Apple hasn't done that."

Apple also scored a low 4.3 out of 10 in Greenpeace's December 2008 Guide to Greener Electronics—worse than competitors Acer, Dell, and HP. The low score is largely due to Apple's reluctance to open up about its operations.

If Apple's poor showing in the Greenpeace and Ceres studies is just a question of stubbornness, why won't Cupertino open up a bit? One reason is that Apple considers such operational details as sensitive information that it's unwilling to share with outsiders.

"Most companies are protective of their supply chain," says SVTC's Davis. "They consider that proprietary information, so they don't necessarily reveal it to you or me."

PHOTOGRAPHY BY PETER BELANGER

Citizenship or Business?

Despite the low grades for transparency on greenhouse emissions, Apple indeed seems to be turning greener. But industry watchers say that the company is touting improvements it would have had to make anyway. "It's not just about manufacturers doing the right thing," says IDC's Daoud. "It's really the market forcing them to do so."

In 2007, the White House issued an executive order requiring that at least 95 percent of the electronic products bought by federal agencies meet standards set by the Electronic Product Environmental Assessment Tool (EPEAT; www.epeat.net)—a system for assessing a tech product's green attributes. "Ultimately, if you want to sell to the federal government, you have to be EPEAT-certified," says Daoud.

Corporate tech buyers are going green, too. "A lot of companies are saying, 'If the federal government is doing it, maybe we should have the same requirements,'" says Daoud.

Similarly, if Apple and other tech vendors want to sell computers in the European Union, they must meet standards set by the European Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (better-known as the RoHS directive), which restricts a variety of materials, including lead, mercury, cadmium, and BFRs.

Apple is obviously paying attention. Its new MacBooks earned an EPEAT Gold rating (the highest available), and they exceed RoHS standards. The bottom line is that going green is good business. "It's expensive [for computer manufacturers] to have two parallel processes, one that's greener than the other," says Greenpeace's Harrell.

Political Piñata

Whatever its motivations for polishing its green credentials, Apple remains a target for environmentalists. Those environmentalists don't think that Apple is against going green; it's just that, following the lead of its CEO, the company hates being told what to do.

"I dearly love Apple; many of us do," says BAN's Puckett. "But the belligerent interface between the company and the environmental community is bizarre." To dig up details about Apple's recycling program, for example, BAN had to go through the office of Al Gore, who sits on Apple's board of directors.

Greenpeace's Harrell tells a similar tale. "Our communication with Apple is very concise," he says. "We don't get a lot of candid backroom conversations." Of course, Apple's chilly relationship with Greenpeace is hardly bewildering. In 2006, as part of its "Green My Apple" campaign, Greenpeace created a fake Apple site that criticized the company for the toxic chemicals still in its products—a public black eye that Apple has since been working hard to overcome. "Given the tactics we used," says Harrell, "it's not surprising that we're not exchanging Christmas cards."

Puckett admits that BAN has targeted Apple not because its policies are any worse than those of its competitors, but because of its customers. "Their demographic is educated, socially minded consumers."

That's why Apple's green marketing push makes sense. "Apple has been singled out as a bad environmental player, so it has to...free itself from the bad publicity," says IDC's Daoud.

"On the design side, Apple has made great moves," says Puckett. "But not without pressure, and not without Steve Jobs saying we were crazy."

Even Greenpeace admits that the new MacBooks are a step in the right direction. "These are much greener products than they've ever come out with on a notebook line," says Harrell.

The greening of Apple will almost certainly continue. Consumers want greener products, and governments are mandating more environmentally friendly business practices. What remains to be seen is whether Apple will become more transparent about its environmental efforts. As Daoud puts it, "It would be damning to say 'We are a green company,'" without providing the proof.

Jeff Bertolucci is a technology and business writer in Southern California.

Power Down

The best way to save energy and reduce your environmental footprint is to turn your equipment off. When you're finished using it, shut it down. Letting your computer sleep is good, but a sleeping Mac is still using 1 or 2 watts. Turning it off altogether reduces the load even more. But even then it consumes a trickle of power. The only way to truly cut a computer's power use to zero is to unplug it—or to connect it to a power-smart power strip.

Sophisticated Circuits' $199 **PowerKey Pro USB 650** (www.sophisticated.com) lets you choose which devices to completely power down. A simpler option is Hobbes's $23 **Mini Power Minder** (www.hobbes.com.tw), which includes ports for your USB-powered peripherals.

If you really want to get off the grid, solar chargers are available for iPods and iPhones, but such chargers for laptops are rarer. The trick is to find a solar charger that will charge your battery, not necessarily one that'll run your laptop. Brunton's $655 **SolarRoll 14** (www.brunton.com) outputs 14 watts, for example, which should be enough to slowly charge your battery. Voltaic's $499 **Generator** (www.voltaicsystems.com) is capable of 15 watts, and Sunshine Solar's £80 (approximately $116 at press time) **Briefcase Charger** (www.sunshinesolar.co.uk) can put out 13 watts—on the low side, but enough to get your battery back on its feet.

PowerKey Pro USB 650

Responsible RECYCLING

What to do with your Mac when its days are over

By Lisa Schmeiser

When your Mac is no longer the shiny new kid on the block, there's no shortage of ways to extend its useful life. An old Mac can work as a recipe-storage library, for instance, and that antique iBook can be a backup drive.

But when you've run out of ways to reuse or repurpose your old Mac, what's the best way to dispose of it? Here are a variety of solutions—some that require little effort, others that are more time-intensive—that'll keep your conscience and your closet clear.

Don't Throw It Away

California, Maine, Maryland, Minnesota, Oregon, Texas, and Washington now have laws regulating where and how you can dispose of unwanted electronics. But in most other states, it's still legal to throw your computers in the trash. According to a recent *60 Minutes* report, an estimated 130,000 computers end up in the garbage annually.

There are all kinds of good reasons not to make yours one of them: lead, mercury, and hexavalent chromium are three of the best. These substances, which are embedded in our computers' assorted parts, are just a few of the toxins that can be released into the environment if an old computer or iPod is just tossed onto a scrap heap or burned. Once in the groundwater or air supply, heavy metals and PCBs released by improperly disposed-of computers linger as cancer-causing compounds.

Clean It

If you are going to dispose of your old computer in some responsible fashion, you first need to make sure that nobody else will be able to access its data.

The first step is to back up all the data on your old Mac's hard drives. Either copy that data to your new machine or pick up an external hard drive and use that as a repository for all the old files. To duplicate the contents of the old drive, use Time Machine. Or if your old system doesn't have OS X 10.5, try Carbon Copy Cloner (★★★★½; macworld.com/3156).

That done, you can now begin to erase all vestiges of your ownership from your old drive. Start by deauthorizing iTunes. You don't want to later realize that you have one less machine on which you can play your old, pre-iTunes Plus music. Next, deauthorize any third-party programs that you'll want to reinstall on your new system.

Now, wipe your hard drive. Track down the installation discs that came with your computer (or use the ones that came with any OS X upgrade you purchased). Insert the disc (Disc 1 if you have CDs, the installer disc if you have the DVD), launch Installer, and reboot the machine using the software on the disc. Once the machine has rebooted, go to the Installer menu, choose Open Disk Utility, select the hard-drive icon in the column on the left, click on the Erase

eBay Guide The auction site eBay has a great guide to selling used electronics.

ILLUSTRATION BY GINA + MATT

Mac Ring Feeling creative? Pillage your Mac stuff for raw crafts materials, as Lauren Anabela Beaudoin does for her Mac keyboard jewelry.

tab, and then click on Options. The 8 Way Random Write Format will scramble your data nicely.

Now that your soon-to-be-departed Mac is wiped clean of all traces of your ownership, it's ready for recycling or donation.

Donate It

If your computer is still in working order, you should consider donating it. The research firm Dataquest estimates that less than 5 percent of all personal computers find a second life at a charity or school. You can increase that percentage by recycling your old electronics with a nonprofit facility.

Such an organization will try to match your old electronics equipment with a school or a charity that can use it. To find a nearby nonprofit or school-based recycler, go to TechSoup's TechFinder online directory (techsoup.org), type in your zip code, and then narrow the results by selecting Computers or Printers And Peripherals from the Technology pull-down menu on the results page. The E-cycling Central site (eiae.org) also maintains a list of donation programs.

Sell It

If your old goods are only a year or three old, you might be able to sell them for petty cash. In addition to the obvious outlets like eBay (check out its guide to selling electronics at macworld.com/4391) and Craigslist (craigslist.org), many online services buy used electronics.

The way most of these sites work is pretty straightforward. You fill out a form detailing what you have, what condition it's in, and whether you still have the original manuals, software, and power adapters (as applicable). The site will then give you a quote and let you print out a mailing label to ship off your gadget. Assuming the site shares your assessment of your old gadget's condition, you'll get a check. You usually pay the postage for these transactions.

NextWorth (nextworth.com), BuyMyTronics.com (buymytronics.com), and Consumer Electronics Recycling (www.cerecycle.com) will take old iPhones and iPods. The services VenJuvo (venjuvo.com) and Gazelle (www.gazelle.com) take laptop computers, while MyBoneYard (myboneyard.com) also takes desktop computer systems.

You won't make a handsome profit—a first-generation iPod mini with the original manuals nets you all of $9 on Gazelle—but you'll have less clutter and a little more cash for your trouble.

Craft It

You could repurpose your 2002 iMac as a digital jukebox (macworld.com/4388) or use your first-generation iPod as an external hard drive (macworld.com/4389). Or, if you're feeling more whimsical than practical, you could ransack your old hardware and peripherals for parts and pieces to use in more-creative ways.

While the rise of flat-screen iMacs has, regrettably, lessened the potential for a next-generation MacQuarium (look it up on Wikipedia), smaller devices and peripherals still provide an opportunity for artistic expression.

For example, craftspeople on sites such as Etsy (www.etsy.com) and eBay have begun disassembling Apple's old keyboards and repurposing the keys as earrings, hair clips, and cufflinks. Metalsmith Lauren Anabela Beaudoin (creativedexterity.etsy.com) makes jewelry with her old Mac parts. Her first bauble was a ring crafted from an escape key, meant to remind the user to take a break from working. Another Etsy crafter, Alicia Murphy-Rodriguez (thelovelyteaspoon.etsy.com), began making her jewelry after

The Power Office

How much electricity do your Macs and peripherals consume?

	KILOWATTS CONSUMED			COST PER YEAR		
PRODUCT	OFF	SLEEP	IN USE	OFF	SLEEP	IN USE
Mac Mini/1.66GHz	0.001	0.002	0.030	$0.85	$1.70	$25.20
Mac Pro/2.66GHz	0.004	0.007	0.237	$3.40	$5.95	$201.37
Power Mac G5/2GHz	0.001	0.013	0.157	$0.85	$11.05	$133.52
Brother laser printer	0.000	0.008	0.750	$0.00	$6.80	$637.26
Apple 23-inch Cinema Display	0.002	0.003	0.036	$1.70	$2.55	$30.35

For the In Use Mac tests, the Flurry screen saver (with default settings) ran for an hour or so. The printing test consisted of printing one 8.5-by-11 page from a browser; the cost is based on a rough average of watts used to print.—MACWORLD TESTING BY ROB GRIFFITHS

How much juice does your home office consume? I tested my usage with the help of P3 International's $52 **Kill A Watt** (www.p3international.com). It's a simple device that plugs into a wall outlet; you then plug your Mac and peripherals into it, and it'll tell you how much electricity they're pulling. One Sunday, I used it to measure how much electricity my home office was drawing. The results for the five most power-hungry devices are in the table here; full results are available at macworld.com/4392. I then took the cost per kilowatt-hour from my last electrical bill and multiplied it by the number of hours in a year (8,760, roughly), and then multiplied that dollar value by the "In Use" numbers for each device. Nobody prints all day every day. But this should give you a sense of the amount of power different home-office devices consume.—ROB GRIFFITHS

PHOTOGRAPH BY LAUREN ANABELA BEAUDOIN

Pick Peripherals Carefully

Monitors, printers, and external hard drives can suck up as much power as, or more power than, your computer if you're not careful (see "The Power Office" for details).

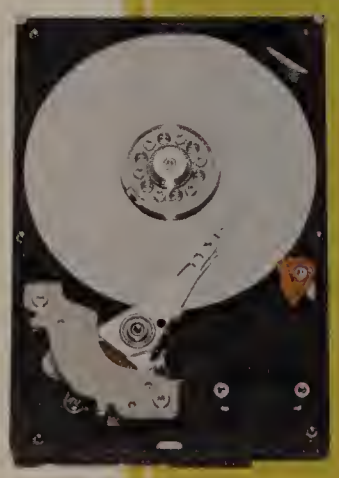
When you shop for peripherals, look for the Energy Star designation. Energy Star is a federal program that sets energy-efficiency standards. Products must meet a variety of guidelines to be deemed Energy Star–compliant: for instance, computer peripherals must have a low-power sleep mode. Monitors and printers can be Energy Star–compliant; for hard drives, seek Energy Star power adapters.

Here are some other tips for buying greener peripherals:

Monitors Unless you need a CRT, get an LCD. A typical LCD requires 25 watts; a CRT, 75. If you need a lot of screen space, get one big display instead of two smaller ones: productivity increases with multiple monitors, but so does energy consumption.

Printers Choose a printer that does duplex printing, so you can save paper by printing on both sides. And look for one that offers a draft mode, which uses less ink.

Hard Drives Look for "green" drives: Western Digital (macworld.com/4385) and Fantom (macworld.com/4398) are selling new drives with energy-saving technologies that the companies say can reduce energy use by 4 to 5 watts. If you can spare the speed and storage space, choose a 5,400-rpm, 2.5-inch external drive made for your laptop. Western Digital's 500GB **Caviar Blue** (macworld.com/4386) desktop model idles at 8.4 watts; the mobile **Scorpio Blue** (macworld.com/4387) idles at just 0.85 watts.



a spilled drink ruined her first keyboard. She now stockpiles raw materials via eBay and yard sales.

If you're feeling ambitious, you could try making your own keyboard accessories. Murphy-Rodriguez explains how: "I pop the keys off the keyboard, clean them up, drill some holes if necessary, glue or add the findings, and ta-da! The most time-consuming part is waiting for the glue to dry."

While you might be tempted by the crafty possibilities presented by your old Mac's internal parts, resist the temptation: Cracking open your old computer or iPod could expose you to some of those same toxic parts that make throwing it away such a bad idea. For example, some old CRT monitors are made with leaded glass. There's also lead in some old computer batteries and in computers' soldered connections. Beaudoin warns, "Even though circuit-board patterns are appealing, they may be better-suited as wall art than jewelry, since jewelry comes in contact with the skin."

Cracking open your old computer could expose you to the same toxins that make throwing it away such a bad idea.

Send It Back to Apple

If you're not feeling particularly artistic or if your device is too ancient for secondhand use, then it's time to find an electronics recycler. Your first step is to find out whether the retailer you bought the product from offers an electronics-recycling program.

Apple's consumer recycling program, which is also open to education purchasers and small businesses, is fairly straightforward. When a customer purchases a new or Apple-certified refurbished Apple computer or Apple Cinema Display monitor, that customer can send one computer, one monitor, and peripheral computer equipment back to Apple for recycling. The best part of the program is that the recycled parts don't have to be made by Apple—so you can take advantage of the program to buy a shiny new MacBook and unload that Windows PC desktop you have sitting around.

There are some restrictions. The program applies only to the contiguous 48 states and Washington, D.C. And if you're shipping anything with a screen measuring more than four inches diagonally, you're going to be charged a California environmental fee (because Apple is headquartered there). Finally, you can't bring your old system in to an Apple Store and drop it off when you pick up your shiny new computer. Apple requires that you box up your old system, print the Apple-provided shipping label, and then drop the box off at a FedEx location.

Those of you looking to recycle old iPods or iPhones have it slightly easier: all you have to do is visit the iPod and cell phone recycle page (macworld.com/4390), fill out a form detailing what you'll be recycling, and print out a prepaid mailing label. Once you've packaged and labeled your items, you can drop them off at the nearest post office.

Find a Third-Party Recycler

If your electronics aren't eligible for manufacturer recycling, you do have some third-party alternatives.

For computer-disposal options that are small in scale and cost, look for facilities that focus on electronics recycling, like Earth911.com (www.earth911.com). Its site has a recycling database that lists all the nearby places that will take your goods, along with maps to help you find them. Results will vary by location, and broader search terms produce better results.

If you're not satisfied with what you find there, a few other sites will point you toward recycling resources. The Consumer Electronics Association site myGreenElectronics.org (mygreenelectronics.org) lists municipal and private recycling facilities, while the

Telecommunications Industry Association's Find a Recycler site (www.eiae.org) lists recyclers by state; site visitors then have the option of sorting their regional recyclers by program type (private, nonprofit, or municipal) or zip code.

If you are decluttering your home and can bundle the computers with other household detritus, one option is to call a general hauling firm like 1-800-GOT-JUNK. The company has 265 locations, and while each franchise has a different way of doing things, spokeswoman Tania Hall says, "All franchise partners have a relationship with a recycler where they would take electronics to be recycled."

In case you're casting about for someplace to drop off unused peripherals, Office Depot sells Tech Recycling Boxes for $5 to $15; you buy the box, fill it with electronics and peripherals, and then return the unsealed box to an Office Depot for recycling.

Plan Ahead

Part of the reason consumer-electronics recycling is such a mess is that responsible disposal is only now becoming part of the upgrade process. Fortunately, many retailers and electronics vendors are following Apple's lead and integrating recycling into the electronics lifecycle. Mobile phone vendors like Verizon, T-Mobile, and AT&T, for example, all offer free phone recycling now. Whatever kind of electronic gadget you're about to buy, make sure you find out what kind of recycling programs the manufacturer has in place before you buy.

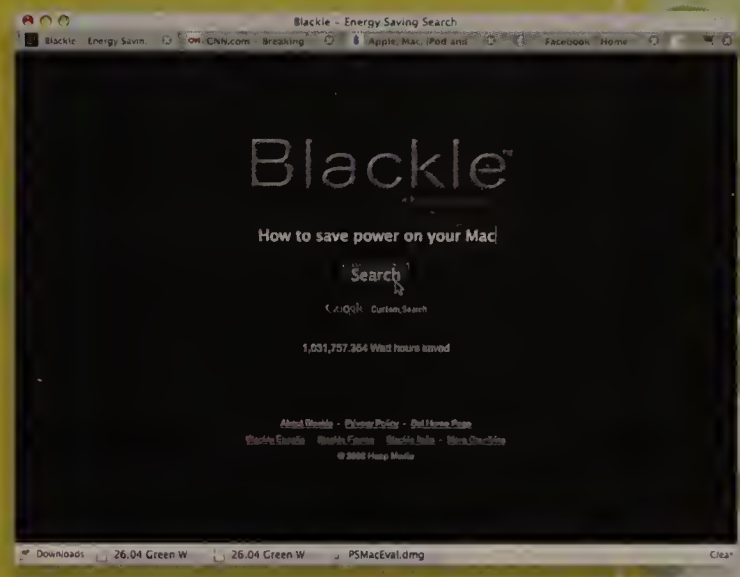
Once you're finished crafting, selling, donating, or recycling your old electronics, you can take comfort in knowing that we're at the end of Electronics Recycling 1.0. If the recycling of electronics keeps pace with the technology itself, the next time you need to get rid of an old gadget, it should be a much easier and more elegant process.

Lisa Schmeiser is a reporter in the San Francisco Bay Area. She also blogs at schmeiser.typepad.com.

Maximize Your Savings

Energy-saving peripherals are only as good as you allow them to be. So make sure you enable whatever energy-saving features they come with (such as automatic shutdown on a printer).

If you're really zealous about saving electricity, you can get more extreme. For example: set your desktop background to black. When LCD pixels are white or a color, they're turned on; when they're black, they're off. The blacker your display, the fewer pixels you're lighting up and the less electricity you're using. You can also try using **Blackle** (blackle.com) as your search engine—it's Google's search engine in an energy-efficient all-black skin.

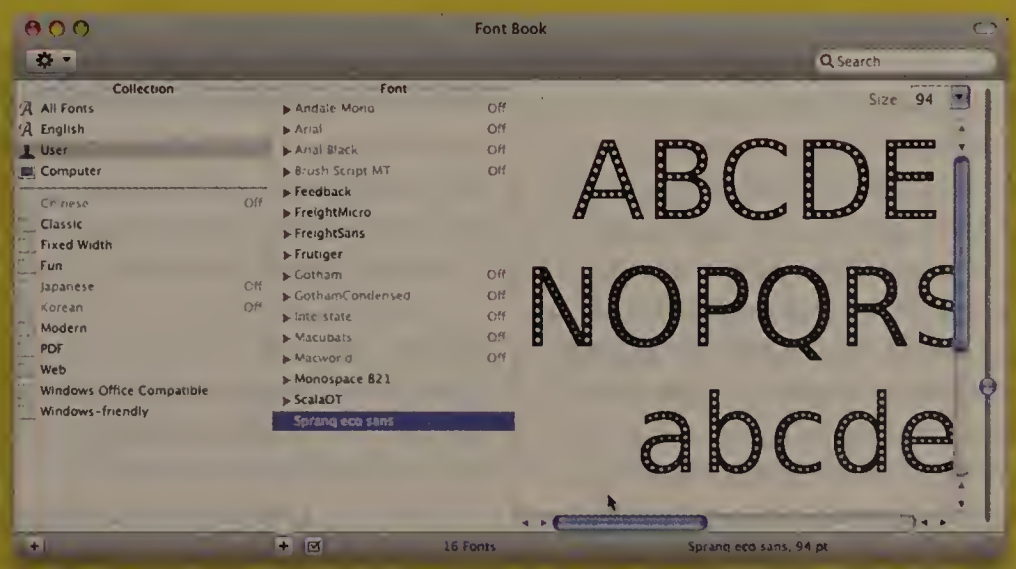


Blackle If you're zealous about saving energy, use Blackle—it's Google in an all-black skin.

To save money on printing, stop doing it so much. For example, use the PDF option in OS X's print dialog box to create digital pages instead of dead-tree ones.

If you need to put ink on paper, print-management software can help you conserve both. GreenPrint Technologies' $29 **GreenPrint Mac** (www.printgreener.com) makes it easy to print only the pages that you really need from a document. Another option is to pick a font that doesn't use so much ink. Spranq's **Ecofont** (payment requested; www.ecofont.eu) is a font that omits as much of a letter as it can while still being legible. It takes some getting used to, but the company says that the font uses about 20 percent less ink than a traditional font.

Just as you should think twice before printing anything, consider whether you really need to burn data to a disc—and perhaps employ reusable digital media instead. Throw that same data on a thumb drive, which you can reuse endlessly, or upload it to a remote storage service such Apple's **MobileMe** ($99 per year; www.apple.com/mobileme) or Evenflow's **Dropbox** (free for 2GB; www.getdropbox.com), which gives you or anyone else you want to share your data with access to it over any Internet connection.



Eco Font If you really want to save ink, use letters with holes in them: Spranq's Ecofont reportedly uses 20 percent less ink to print than standard fonts.

E-mail Etiquette

How to mind your manners when sending messages

BY CHRISTOPHER BREEN

Just as the posted letter once replaced the smoke signal as a primary means of long-distance communication, e-mail is now displacing the letter. As it does so, many of us are moving into uncharted behavioral territory. But fear not—our etiquette expert, Mac Manners, is on the case. So sit up straight, silence your cell phones, and follow along as we offer advice on how to conduct yourself in e-mail.

Dear Mac Manners:
I recently sent an e-mail message about a political event to friends and family. Instead of the supportive reply I expected, an upstart relation chided me for putting all of the recipients' addresses in the message's To field. What terrible crime have I committed?

Offended in Oxnard

Dear Offended:
My guess is that your relative was, as gently and respectfully as possible, alerting you to the fact that polite people do not plaster dozens of e-mail addresses into a message's To field. People often pass messages like yours around, and when they do, all those addresses get passed as well, violating the privacy of anyone hoping to keep his or her e-mail address under wraps.

A packed To field can also be inconvenient for recipients. Reading a message with a long To field on an iPhone, for instance, is a bother when you have the Details field visible. You must either hide this field (and remember to display it later) or scroll, and scroll, and scroll some more (see "Overloaded iPhone 'To' Field").

To avoid this breach of etiquette in the future, put all addresses but your own in your e-mail client's BCC (blind carbon copy) field—which isn't visible to recipients. That way, everyone gets the message but no one can see the other recipients' addresses.

Dear Mac Manners:
I understand the advantage of using the BCC field, but I don't know how to find it in my e-mail client. Can you help?

Confused in Connecticut

Dear Confused:
My pleasure. To expose the BCC field in OS X 10.5's (Leopard's) Mail, select View: BCC Address Field. This causes the BCC field to appear in all new messages. Alternatively, you can click on the Customize pop-up menu just to the left of a message's From area, and then choose BCC Address Field. This, too, exposes the BCC field. In 10.4's (Tiger's) version of Mail, create a new e-mail message by choosing File: New Message, and then select View: BCC Address Field.

Microsoft Entourage always reveals the BCC field when you enter a new address. Just click on the To field in a new message, and a larger window that includes the BCC option will pop up.

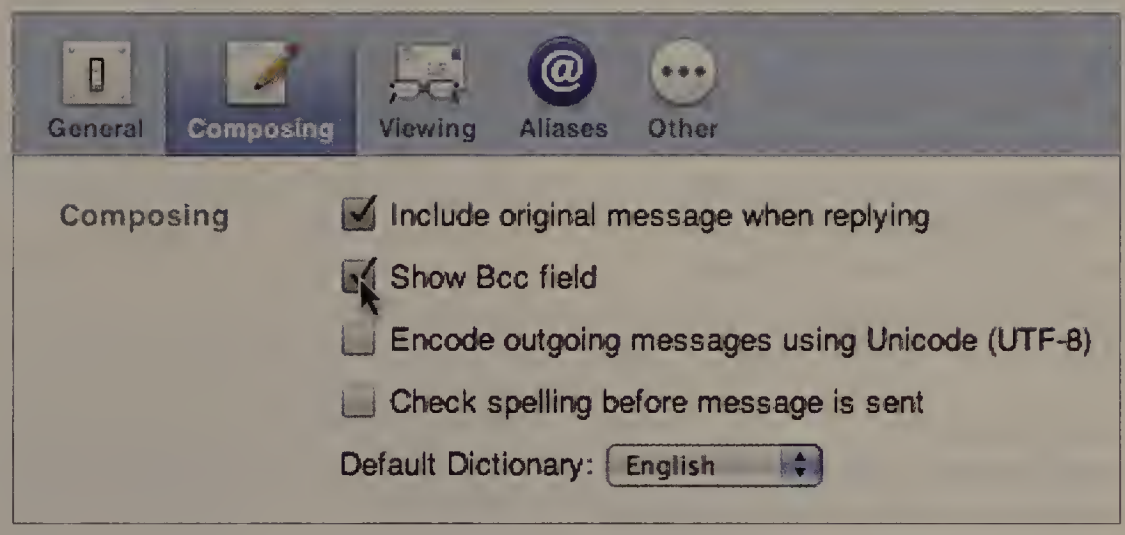
Web-based clients such as Yahoo Mail, Gmail, AOL, and MobileMe also include BCC options. When you're creating a new message in Yahoo Mail, look to the right of the To field. You'll see a Show BCC link. Click on it, and the BCC field appears. In Gmail, under the To field in a new message, you'll spy an Add BCC link. Click on it, and there's your BCC field. In AOL, click on the BCC link next to the To field in a new e-mail message. And when visiting MobileMe's mail client, choose Preferences from the Tools menu, click on the Composing tab, enable the Show BCC Field option, and click on Save (see "BCC and MobileMe"). All new messages you create will now include a BCC field.

Dear Mac Manners:
A friend often forwards messages to me, but more often than not I have to scroll through the message to find the text I want to read. Do you have any advice?

Perplexed in Poughkeepsie

ILLUSTRATION BY ELIZABETH PRAGER

Dear Perplexed,
You might simply explain that there are two problems with forwarding messages in this manner. The first is that when you forward a message without editing it, you forward the sender's e-mail address (or, worse, multiple senders' addresses), too. Secondly, when a message has been forwarded a few times, the important material is often pushed to the bottom. No one really wants to read line after line of "Hey, check this out!" It's for this reason that we should edit out the dross before clicking on Send.



BCC and MobileMe To expose the BCC field in MobileMe's Web-based e-mail client, locate the Composing tab in MobileMe's Preferences.

Dear Mac Manners:
A cousin sent me an unprintably uncouth reply to a message full of jokes I sent to family and friends. How should I behave when I next see her?

Irked in Irkutsk

Dear Irked:
Apologetically. Before sending a chain letter, a list of your favorite cat jokes, a political or religious screed, or a link to a YouTube video of a toddler stuck in a sousaphone, be absolutely certain that the person you're sending it to will welcome it. And the best way to find out is simply to ask. A message along the lines of "I occasionally send tasteful jokes that I enjoy to my friends. Would you care to be included?" will help prevent another testy response.

Overloaded iPhone 'To' Field Pack too many recipients into an e-mail message's To field, and people receiving your message on an iPhone will have to scroll before they can read a word.

Dear Mac Manners:
To avoid spam, I use my Internet service provider's challenge-response feature. Oddly, since I started using it, I receive very few replies to my e-mail messages. Have I done something to offend people?

Challenged in Chattanooga

Dear Challenged:
Oh my, yes. Let's suppose that you sent this question to me via e-mail. I take the time to compose a thoughtful response, send it, and almost immediately receive an automated reply demanding that I verify my identity by visiting a Web page and entering a password before my message is delivered to your inbox. Even the most forbearing person could be forgiven for doing nothing more than tossing that automated demand into the trash. This, I suspect, is what's happening to you.

C-Command's $30 SpamSieve (5 mice; macworld.com/2671) is an immensely capable spam utility that lets you take responsibility for your own spam issues rather than foisting that responsibility on people you hope to correspond with. But if you'd rather keep your challenge-response system, at least have the courtesy to add the e-mail addresses of known correspondents to your white list (a list of accepted recipients who won't be subjected to a challenge) before sending a message to one of them. Ask your ISP how to do this.

Dear Mac Manners:
My e-mail client allows me to flag messages by importance (High, Normal, and Low). I've been reluctant to use this feature because, at one extreme, I don't want to alarm people and, on the other, I don't want to dissuade them from reading my message. What's the proper use of these flags?

Flagging in Flagstaff

Dear Flagging:
I see little value in flagging a message as low priority. If your message is so unimportant that it earns this kind of disdain even from you, why would anyone be tempted to read it? However, I can imagine situations where you might make an exception; for instance, if you work in an office where you're constantly bombarded by high-pressure e-mails, you may want to assign "when you get around to it" messages a low priority.

A high-priority flag can be useful in a couple of ways. Let's suppose you work in an environment where colleagues receive metric tons of e-mail each day. And because they do, many don't read their e-mail right away—there's just too much of the stuff to sift through. Flagging your message as high priority

will likely cause others to read it sooner rather than later.

The danger of high-priority flags is in their overuse. If you assign this flag capriciously, people you routinely correspond with will learn to ignore your messages (see "Urgent"). To avoid becoming the Correspondent Who Cried Wolf, use that flag with care.

Dear Mac Manners:
I've done a terrible thing. We have two Justins in our office—Justin G. and Justin K.—and I sent a catty message regarding Justin G.'s floral spats to Justin K. Or so I thought. Somehow my message went to Justin G. and not Justin K., and now I can't face Justin G. in the lunchroom.

Shamefaced in Shiloh

Dear Shamefaced:
You've been betrayed by your e-mail client's Autofill feature—which automatically fills in a recipient's address as you type a name into an e-mail message's To field. This is a convenient feature—most of the time. But as you've discovered, it can also cause a message to go terribly astray. Regrettably, today's popular e-mail clients don't provide a way to turn this feature off. It's therefore incumbent upon you to be careful. The easiest way to do so is to simply never say anything in e-mail that might offend someone, regardless of who reads it. But what fun is that?

Another option is to assign nicknames to contacts you're likely to confuse. For example, if Justin G. works in the mailroom and Justin K. puts in his hours operating the office copying machine, assign the G.-man the nickname "mailroomjustin" and the other Justin, "copycat."

To do this in Address Book, select a contact's name, click on Edit at the bottom of the Address Book window, and then enter a name in the Nickname field. When you type the nickname in a message's To field, Mail will swap in the e-mail address associated with it.

Dear Mac Manners:
THIS IS THE THIRD TIME I'VE WRITTEN TO YOU, AND YOU HAVE YET TO REPLY!!!! IF THIS IS THE KIND OF DREADFUL SERVICE YOU TYPICALLY PROVIDE, YOU CAN FORGET ABOUT NEXT YEAR'S FRUITCAKE!!!!!

Cranky in Crawford

Dear Cranky:
Thank you for providing such an excellent example of an unacceptably rude message. You've not only typed in all capital letters (which is considered shouting), but also used the exclamation point to excess. This message begs to be ignored, which I shall now do.

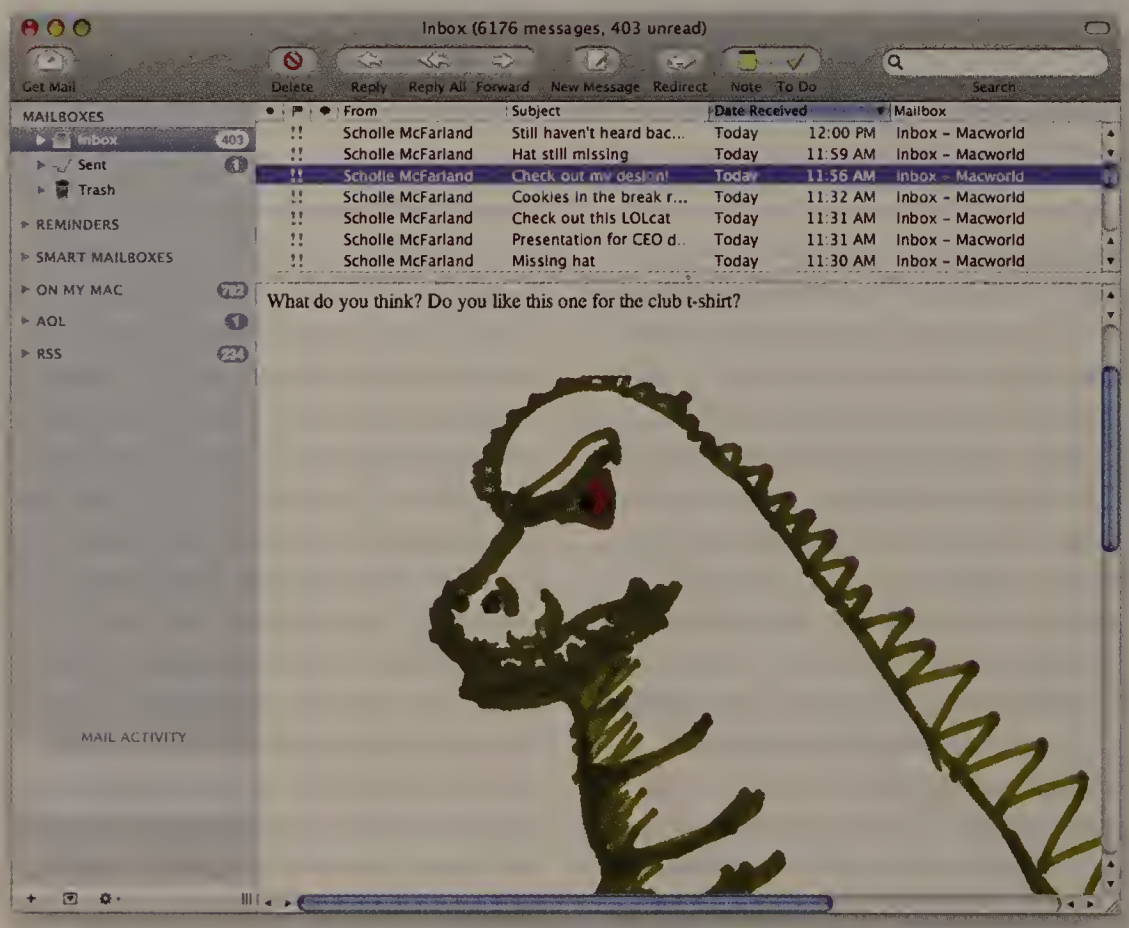
Senior Editor **Christopher Breen** is the author of *The iPod and iTunes Pocket Guide*, fourth edition, and *The iPhone Pocket Guide*, third edition (both Peachpit Press, 2008).

Rotate Your E-mail Signatures

Some creative individuals use their e-mail signatures to pass along a clever bon mot—"Life is for the living," "A penny saved is lost to Wall Street," or "Eat at Joe's," for example. But why offer just a single thought when you can queue up a slew of them and distribute them at random?

To do so with OS X 10.5's (Leopard's) Mail program, choose Mail: Preferences and click on the Signatures tab. Choose an account in the resulting Signatures window's leftmost pane, click on the plus-sign (+) button beneath the second pane, and type in some signature text in the rightmost pane. Continue to add signatures until inspiration fails you.

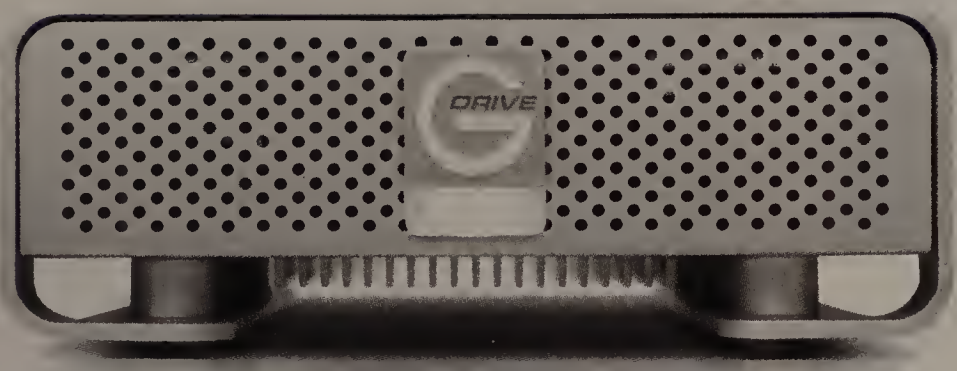
From the Choose Signature pop-up menu at the bottom of the window, choose At Random to have any old signature appended to a message. To insert your signature quotes in order—the first message of the day gets Signature One, the second message gets Signature Two, and so on—choose In Sequential Order from the Choose Signature pop-up menu.



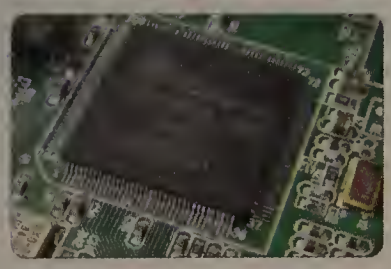
Urgent To avoid being ignored, don't become the person who flags every message as high priority.

I may be beautiful...

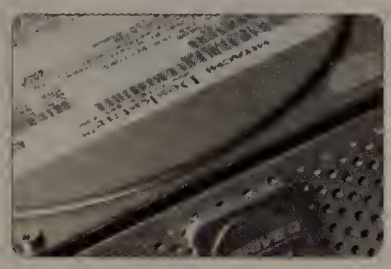
But it's what's on the inside that really counts!



The folks at G-Tech built me with only the highest-quality components inside. My rugged, all-aluminum enclosure and built-in heat-sink keeps my hard drive safe and cool, and me whisper quiet. All of this attention to detail makes me the best place to store your stuff. Don't trust anything less.

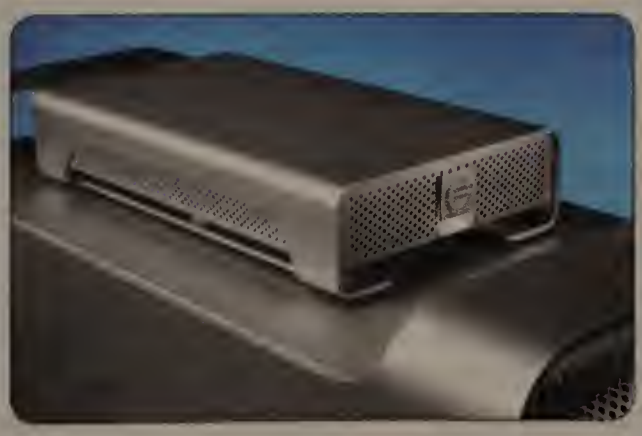


Oxford chipset



Hitachi hard drive

Integrated heat-sink



G|DRIVE Q

High-performance external hard drives for Macs

- Quad interface - eSATA, FW800, FW400, USB2.0
- Capacities to 1TB
- Ultra quiet operation
- Time Machine ready !
- 3 year factory warranty

Macworld

See our special offers for Macworld readers at www.g-technology.com/macworld

Performance. Style. Reliability.

G-Technology, Inc.
www.g-technology.com

Fill In Missing iTunes Track Info

Take advantage of music info in the iTunes Store **BY KIRK MCELHEARN**

When you buy a new CD and slip it into your computer's optical drive to rip it, iTunes automatically queries an Internet-based database to discern the artist's name, the album's title, and the titles of its tracks. (If it doesn't, you may need to turn this option on in iTunes' General preferences—Automatically Retrieve CD Track Names From Internet.) iTunes uses the Gracenote CD database (CDDB), which stores information on more than 6 million CDs and more than 80 million tracks. In most cases, you'll get track information for your CDs, but in some cases, the query to Gracenote comes up blank.

Gracenote When you rip a CD, it's the Gracenote service that provides track information in iTunes.

Gracenote is good at finding track info for most mainstream releases and popular artists, from Madonna and Britney Spears to the Rolling Stones and the Beatles, and it's generally reliable for indie bands as well. As I rip my CDs, I find that even some quite obscure music gets identified correctly. But a fair number of albums slip through the cracks, notably classical music on small labels.

You can enter track information manually if iTunes doesn't provide it to you: select the first track, press ⌘-I, and enter the track name. Press ⌘-N to go to the next track, and when you get to the end, select all the tracks, press ⌘-I and enter the album name, artist, and genre.

In some cases, you can use a handy shortcut to copy tag information from existing tracks, even if you don't own them. The iTunes Store has a lot of music, and you may find the album you're ripping there. (The content of the iTunes Store is not related to the information in the Gracenote CDDB.) If so, you can use it to tag your disc.

Copying Tags Run the Copy Tag Info Tracks To Tracks applet, and you can choose the tags you want to copy.

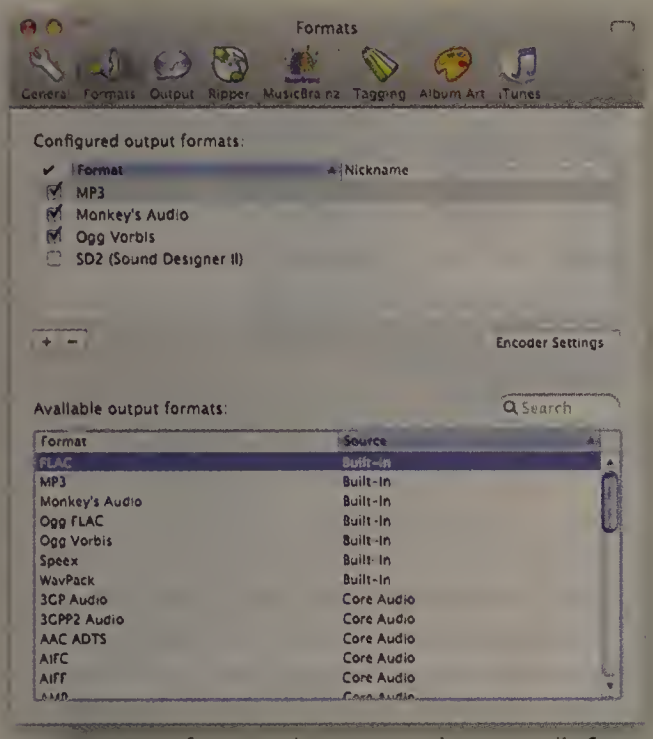
Search for your album in the iTunes Store. If you find it, select its tracks on its Store page and then drag them to a playlist. (I keep a playlist named "Temp" in iTunes for this exact purpose.) The playlist will contain 30-second previews of the tracks you dragged in, yet each track will contain all the tags that are applied to the full track.

Next, get AppleScript wizard Doug Adams's Copy Tag Info Tracks To Tracks applet (macworld.com/4339) and follow the instructions to install it. With your Temp playlist selected, run the script; it will first ask you if the tracks are in the correct order, and then it will display a dialog box letting you choose which tags to copy (⌘-click to select multiple tags).

A dialog box will then ask you to select the tracks to which you want to copy the tags. Switch to iTunes, go to your disc, select all its tracks (⌘-A), and then go back to the Copy Tag Info Tracks To Tracks application. Click on

Play Windows Media Files on Your Mac

If you've had your ear to the ground, you know that increasing numbers of Windows PC users are switching over to the Mac and OS X. And with that switch comes a measure of confusion (and, yes, I mean in areas other than "What do you mean my new computer isn't subject to tons of adware and spyware!?").



Max If you need to convert obscure audio formats to something iTunes can deal with, try Max.

When a friend or relative hops the fence to the greener grass that is the Mac, I usually get a message along these lines: "Help! I've managed to move my beloved movie files from my PC to the new Mac you talked me into, but none of the movies will play. Or they'll play but they show only a white screen. I'm switching back to a PC if you don't help me right now!"

The answer is simple, because the person is almost certainly trying to play Windows media files. Those files aren't natively supported by QuickTime, but you can force QuickTime (and any Mac media applications that use QuickTime's technology, which is just about all of them) to play them by downloading and installing Flip4Mac's free Windows Media Components for QuickTime (macworld.com/2393). Do this, and the files should be good to go.

If the files still won't play, grab a copy of the also-free Perian (www.perian.org). With Perian installed, QuickTime (and its related applications) can play a slew of otherwise-unsupported audio and video files from within QuickTime Player itself. That should do it.

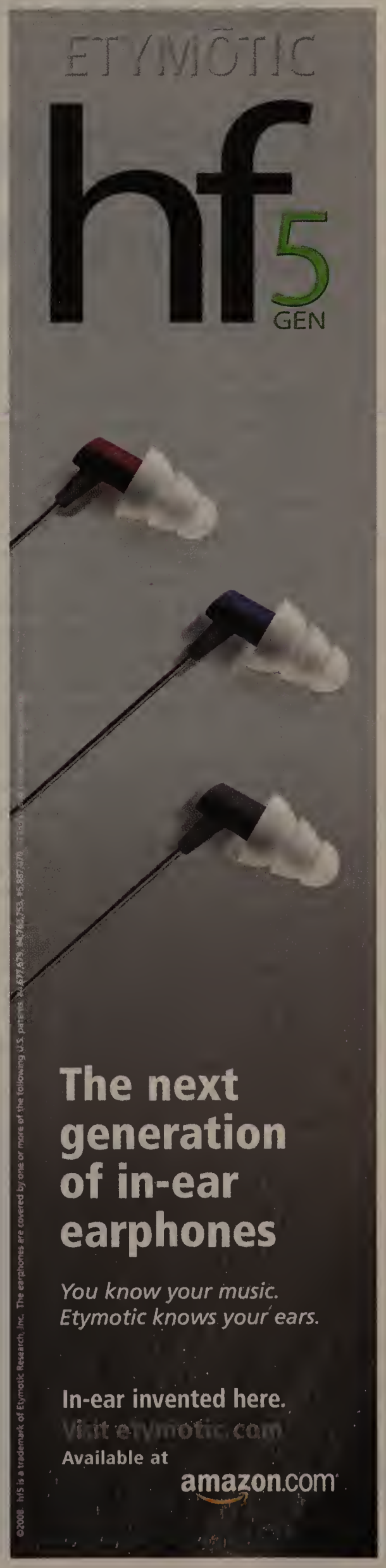
Ah, but what about less-common audio file types such as FLAC, Ogg Vorbis, or Monkey Audio (.ape)? Call on Max (sbooth.org/Max). Yet another freebie (though payment is requested), Stephen F. Booth's Max can convert your audio files to and from more than 20 compressed and uncompressed audio formats.—CHRISTOPHER BREEN

OK to start the copy process. You'll see iTunes replace the information for your CD as the applet adds the tags. Now you can rip your disc, and your music will be correctly tagged.

You can use the script for other purposes, too. For example, if the tags that Gracenote provides to iTunes are misspelled or don't display accented characters correctly (a problem with classical music and music from non-Western countries), and you find the music in the iTunes Store, you can use it to replace the tags on tracks you've already ripped. And if you have several versions of a classical work with different tags, you can normalize them: fix the tags for one version and then copy them to the others you have. You can also use this method for music you've downloaded from other sources, to add or tidy up tags.

While the script won't solve all of Gracenote's lacunae, I find that it often makes ripping classical music, for example, a bit easier. As more music appears in the iTunes Store, that content can turn into a reliable database that you can use to make sure your music is tagged correctly.

Senior Contributor **Kirk McElhearn** writes about more than just Macs at his blog, Kirkville (www.mcelhearn.com).



Customize Your Calling Cards

Online printing services can help you get noticed **BY HEATHER KELLY**

Thanks to the proliferation of affordable and easy-to-use online printing services, business cards are popping up outside the office, freed from the confines of the 9-to-5 workday. Freelancers and job hunters use them to stand out in a crowded employment market, and networkers and social butterflies hand them out to everyone from close friends to potential dates. But searching for the right online printing service can be frustrating. Here's how to cull some of the most promising ones.

Break the Mold Create a card that reflects your personality with these uniquely shaped options from Greenerprinter.com (bottom left) and Premiumcards.net.

Learn the Lingo

The quality of your cards depends in part on the type of paper used. A rule of thumb: the thicker or stiffer the paper, the better. There are multiple ways to determine the sturdiness of card stock, but most printers stick to pounds, points, or *g/sm* (grams per square meter). Unfortunately, since no one method is used by every printer, comparing paper quality can be tricky.

As a general guideline, your business card should be at least as thick as an index card. The most desirable card stock is between 60 and 100 pounds. (A pound corresponds to 500 sheets of uncut stock.) The rough equivalent in points, which is based on the paper's thickness, is 14 to 18 points. In Europe, card stock is mostly measured in g/sm. For business cards, you want paper between 200 and 400 g/sm. (Get a detailed comparison of paper measurements at macworld.com/4343.) Most printers will send samples if you request them.

Think Outside the Rectangle

The standard business card is 3.5 by 2 inches, but if you're in a creative field or looking for a personal calling card, a unique shape, size, and texture reflects your personality and sets you apart from the crowd.

One of the most popular sites offering unusual business card options is the hip printer Moo.com. Moo's signature product is the MiniCard—a 1-by-2.75-inch calling card that can also be a canvas for your digital photos or other artwork. You can upload as many as 100 different images or have Moo pull them directly from your Bebo, Etsy, Facebook, Flickr, Fotolog, Livejournal, or Vox account.

If you don't have existing images you want to use, dig through Moo's library of free designs. Drag as many images as you like to the drop box section at the bottom of your browser window. Once you have a good selection, click on Make MiniCards to preview and edit your final product.

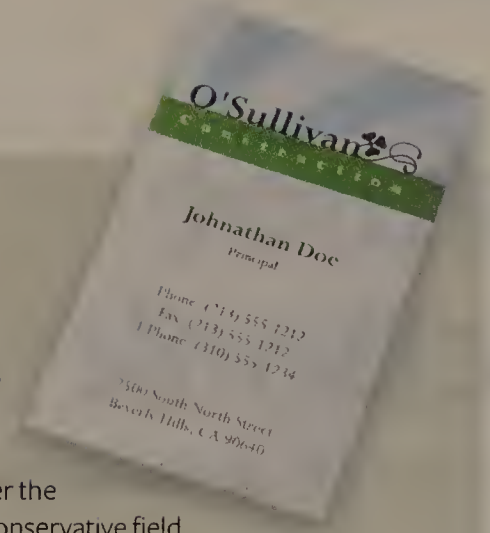
Editing in Moo is intuitive, and just limited enough to keep amateur artists from going overboard. If you find the font and placement options confining, you can bypass them by uploading a custom file. MiniCards are $20 for 100; standard cards are $70 for 200. The paper stock is a sturdy 350 g/sm and all cards have a matte laminate surface, which is the most flattering option for photographs.

Another source for offbeat cards is Premiumcards.net. Have you dreamed of having a calling card that can double as a coaster? Select from round and square coasters, playing cards, bifold cards, magnetic cards, and sticker cards (see "Break the Mold"). The minimum order is 1,000. Prices start at $55.

Premiumcards.net doesn't offer interactive online design templates; you must upload your own files. The site does have downloadable Adobe Illustrator and Photoshop templates with text,

PHOTOGRAPHY BY PETER BELANGER

Business Card Design 101



Designer Walter Gray Lamb (www.waltergraylamb.com) has been designing business cards for more than 30 years. Here are some of his top tips.

Remember Your Profession Carefully consider the message you want your card to send. If you're in a conservative field like finance or law, an outrageous design could undermine the recipient's confidence in you. If you have a creative job, a dull card might cast doubts on your creative abilities.

Pick the Right Font Text on a business card should be sized between 8 and 10 points. Serif fonts are more traditional and easier to read than sans serif fonts, which are more modern and less personal. Italics are conversational. Boldface should be used sparingly.

Make Your Name Pop To make your name stand out from the rest of the info on your card, put extra white space around it, make it bold or a different color, or set it in all caps.

Don't Make Your Mark Unless you have design experience, do not attempt to create your own logo. It's more difficult than it seems. Using a poorly designed logo is the easiest way to look like an amateur.

Keep It Simple Avoid piling too many design elements and colors onto your card. Consider leaving some negative space or one side of your card blank for notes. (Keep in mind that glossy cards are difficult to write on.)

Leave Something Off Don't include one piece of information—your cell phone number, for instance. Then, before handing your card to someone, hand-write the number on the back of the card. This makes the recipient feel special.

cut, and bleed boundaries to guide you. If you don't have the proper software or skills, you can pay $30 for design assistance. The company's in-house designers will create a customized layout and send you a proof via e-mail.

Stick to a Budget

Nonstandard cards can be pricey. But while many of the deep-discount shops churn out poorly printed cards on flimsy paper, there are exceptions.

At first glance, Overnightprints.com looks like any other bargain printing site, but its interactive, online design feature is top-notch and the products it creates are surprisingly good. It offers the standard 3.5-by-2-inch card printed on good-quality 15-point stock, as well as a host of other printable options such as greeting cards, brochures, and envelopes. You pay a very reasonable $30 for 250 cards.

VistaPrint.com kicked off the online card-printing fad a few years ago with its free business card incentive, which you can still take advantage of. For the cost of shipping ($8 for 14-day turnaround), you get adequate one-sided cards printed on 80-pound paper with a matte finish. The caveat is that you must choose from 42 generic templates, and each card will have a small VistaPrint logo and tagline printed on the back. If you don't like that, Bizcard.com has a similar free deal, but it offers a greater selection of templates than VistaPrint and its logo will not appear anywhere on your card.

Make the Right Impression

In many professional circles, the quality and feel of a card says more than the information printed on it. A heavier stock, textured paper, or simple text-only design can send a subtle message that bright prints and kitschy shapes can't.

If you want superior color prints on thick stock, Modernpostcard.com sells 250 cards for $69. This is the same price as for Moo's standard cards, but you will get slightly higher quality. Modern Postcard doesn't have online design capabilities, but you'll receive traditional, hands-on customer service.

If full color isn't your style, you can make an elegant statement with a classic one- or two-color calling card printed on luxurious stock. The gold standard for paper, Crane & Co., offers custom business card printing online (macworld.com/4344). For around $200 for 100 cards, the company will hand-engrave, thermograph in metallic ink, or letterpress your mark and contact information on 100-pound all-cotton paper (see "Keep It Classic"). Crane's paper is made from recovered cotton fibers left from the textile manufacturing process.

Another subtle way to make a statement with your business card is to go green. Berkeley-based Greenerprinter.com is a certified green business company. It prints with soy- and vegetable-based inks on a 16-point, 100 percent recycled card stock that's 50 percent post-consumer waste. Two-sided full-color cards start at $75 for 500. Greenerprinter.com even buys carbon-offset credits to compensate for the emissions created during shipping.

Associate Editor **Heather Kelly** is quite fond of her *Macworld* business cards.

Keep It Classic Go for cards engraved on 100 percent cotton paper, like these from Crane & Co.

Troubleshoot Your MacBook

Solve the most vexing laptop problems **BY TED LANDAU**

From touchy trackpads to balking batteries, Apple's portable computers (the MacBook, MacBook Pro, and MacBook Air) are vulnerable to certain problems not shared by their desktop siblings. If you have an Apple laptop that's giving you grief, here's how to fix the most common woes.

Sluggish Performance

Does your new MacBook Pro perform as if it were swimming upstream against a strong current, especially when you're using graphics-intensive applications? If so, go to System Preferences and select Energy Saver. In the Graphics section at the top of the pane, enable Higher Performance instead of Better Battery Life. This switch forces the MacBook Pro to use the faster of its two graphics processors, the Nvidia GeForce 9600, instead of the slower GeForce 9400M GT. All of your graphics-intensive applications should now run at a snappier pace. (For more on this setting, see "How Green Is Your Mac?" on page 55.)

Display Problems

If you connect an external display to a MacBook Pro (Late 2008), you may find that the monitor's screen flashes on and off when you wake the laptop from sleep. Unconfirmed reports place responsibility on that GeForce 9400M GT chip. One way to work around the problem is to shift to the other graphics processor, the GeForce 9600, as explained above.

Some users claim the GeForce 9600 has problems of its own: odd distortions appear when scrolling, and sometimes the display goes completely black, especially when you're playing games.

Nvidia contends that the chips have no hardware defects, so there is no official fix yet. However, both Apple and Nvidia have acknowledged a similar problem with the GeForce 8600M GT, which is used in older MacBook Pros; if your laptop qualifies, Apple will repair it free of charge, even if it's out of warranty.

Glossy Display

Are you unhappy with the reflective glare from the glossy display on your new MacBook? Would you prefer a matte finish? If so, don't expect any help from Apple. All of Apple's current line of laptop computers ship with glossy displays; only the new 17-inch MacBook Pro (macworld.com/4259) comes with a built-to-order matte option.

One workaround is to buy a matte protective film for your MacBook. Photodon (www.photodon.com), for example, makes a cover screen that fits the current MacBook and 15-inch MacBook Pro models.

However, many users report that the film adds graininess to the display. And it may also be aesthetically unpleasing, as it can alter the transition from the display to its surrounding black border.

Battery Not Charging

Does the battery in your older MacBook or MacBook Pro fail to hold a charge? Before you buy a new battery, make sure you've installed the latest MacBook Pro Battery Update (macworld.com/4372). That alone may fix the problem.

To check, go to the SystemConfiguration folder in /System/Library and look for a file named BatteryUpdater.bundle. Select Get Info for the file. If its version number is 1.2 or 1.3, you should be fine. If not, or if you can't find a BatteryUpdater.bundle file, download the update from Apple's Web site and install it.

If installing the update has no effect, you probably need a new battery. The good news is that Apple may replace the battery for free, even if your MacBook is no longer under warranty. To find out whether your laptop qualifies, take it to an Apple Store; the staff will check to see if your MacBook meets the criteria.

Need FireWire

The latest MacBook Pros have only a FireWire 800 port. What if you need the older FireWire 400 port? You can get one, but it will require an additional purchase. You actually have two options.

First, you may be able to get by with an 800-to-400 FireWire cable (store.apple.com). Otherwise, you'll need to buy a FireWire 400 card and insert it in the MacBook Pro's ExpressCard slot.

The latest MacBooks (as opposed to the MacBook Pros) come with no FireWire ports at all and no ExpressCard slot. If you have one of these, you

ILLUSTRATION BY CHRIS GASH

SUBSCRIBER SAVINGS CARD

GET UP TO **79%** OFF

PLUS A FREE CD-ROM!

BONUS: Over 650 MB of cool game demos and shareware!

ANNUAL COVER PRICE	YOUR ONE-YEAR RATE	YOUR FREE GIFT
$83.88	$19.97	FREE CD-ROM

As a new subscriber, you are entitled to a reduced rate on *Macworld* – 79% off the cover price. BONUS: the *Macworld Gaming MegaPac CD-ROM* – FREE with your order.

☐ 1 year (12 issues) just $19.97. YOU SAVE 76%.
☐ 2 years (24 issues) just $34.97. YOU SAVE 79%.

Name (please print)

Address

City State Zip

Email

To receive a FREE Macworld email newsletter and updates about your subscription to Macworld magazine, please provide your email address.

☐ Payment enclosed. ☐ Bill me later.

Offer good in the US only Canadian and International orders, please visit http://www.macworld.com/outsideUS.
Savings based on annual US newsstand rate of $83.88.

J94N22

Rush my bonus gift!

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 112 BOONE IA

POSTAGE WILL BE PAID BY ADDRESSEE

Macworld®
PO BOX 37778
BOONE IA 50037-2778

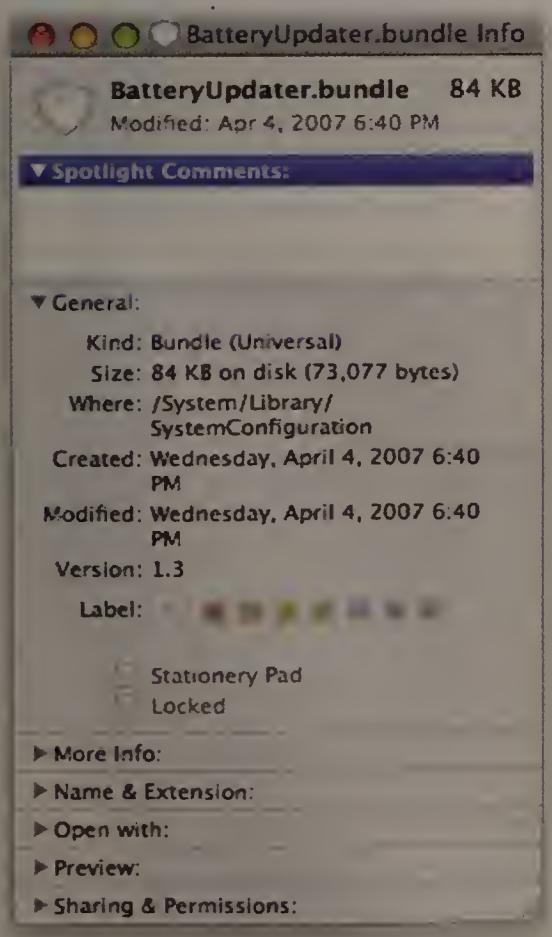
are simply out of luck; you'll have to find a USB alternative.

Trackpad Button Failure

If your MacBook or MacBook Pro is one of the Late 2008 models, you may have found that pressing the trackpad button sometimes has no effect. You can restore your trackpad to full functionality by installing the MacBook Pro Trackpad Firmware Update 1.0 (macworld.com/4373). If you haven't already installed the update, it should show up automatically the next time you check Software Update.

One caution: if the firmware installation is interrupted for any reason, you may wind up with a completely nonfunctional trackpad. If that happens, you need to find a way to perform the firmware installation again.

The simplest solution is to temporarily connect a mouse to your laptop. Next, using the mouse instead of your comatose trackpad, navigate to the firmware update application and start over. If the update completes successfully this time, your trackpad should be up and running again.



Battery Update The Info window for BatteryUpdater.bundle shows that its version is 1.3, meaning you have the most recent update.

Battery Maintenance

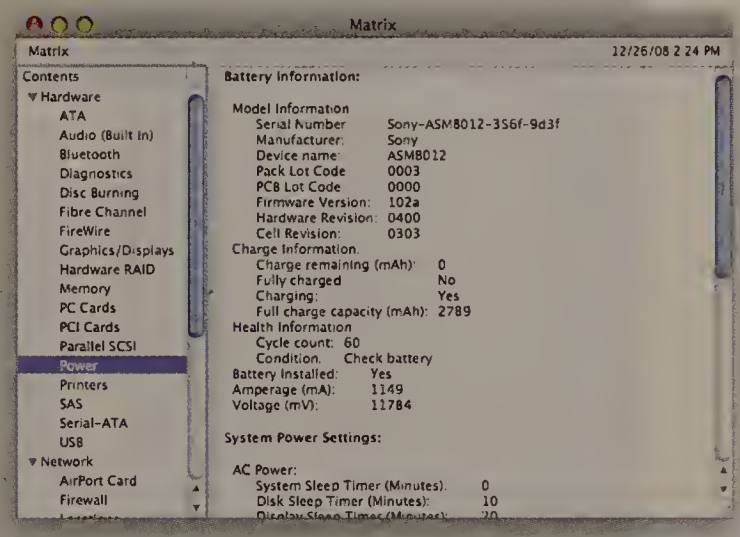
To maximize the useful life of your battery, Apple recommends recalibrating it every couple of months. Briefly, you do this:

1. Fully charge the battery and then disconnect the laptop from its power adapter.
2. Keep the computer awake and running until the low-battery warning appears.

Then continue to run the computer until it either goes to sleep or shuts off. After it does so, wait five more hours.

3. You can now recharge the battery as normal. If your battery still fails to hold a decent charge, you need to replace it.

More generally, assuming you are running Mac OS X 10.5, you can check the health of your MacBook battery by going to System Profiler and selecting Power. From there, look for Health Information. If the Condition says Check Battery (or anything other than Good), even when the battery is fully charged, it's probably time to replace your battery. (Get more details about monitoring your MacBook's battery at macworld.com/4376.)



Check Battery When System Profiler tells you to check your battery, that may actually mean it's time to get a new battery.

Dead Laptop

If your MacBook appears totally dead and it's running on battery power, your first step should be obvious: connect the laptop to the nearest electrical outlet. You may have a completely discharged battery. Give it a few minutes and then try to restart the laptop.

If that doesn't help, simultaneously press control, 1, and the power button. This may get the computer to restart. Otherwise, force the laptop to shut down (by holding the power button down for at least ten seconds) and try to restart it.

If all of these suggestions fail, it's time to reset the laptop's SMC (System Management Controller). For Apple's latest MacBook and MacBook Pros, remove the battery, disconnect the AC power, and hold down the power button for five seconds. When finished, put everything back and attempt to start up. For more details, see Apple's support articles at macworld.com/4374 and macworld.com/4375.

If your MacBook remains dead even after all of this, it most likely requires a hardware repair. Take your laptop to an Apple Store or to an authorized service center.

Keep Updated

This past December, Apple released SMC Firmware and EFI Firmware updates for the Late 2008 MacBook, MacBook Pro, and/or MacBook Air. Exactly what these updates fix is a bit vague. All Apple says about the EFI update is that it "fixes several issues to improve stability." As for the SMC update, Apple is a bit more specific: it "improves the sensing and accuracy of the MagSafe Power Adapter indicator light, and the battery charge indicator lights."

If you're having any unexplained problems with your laptop, install these updates (and any newer ones that may come along). With Apple generally not divulging all these updates do, you never know what they might fix.

Senior Contributor **Ted Landau** has recently updated his book, *Take Control of Your iPhone* (TidBits Publishing, 2009).

Get Audio into Your Mac

How to work with mics and other input methods **BY CHRISTOPHER BREEN**

You can use your Mac to record late-night jam sessions, snatch tunes hummed into a microphone, and much more. But to do any of these things, you'll need to carefully consider the type of input device that will best suit your needs and help you get high-quality sounds into your Mac.

Remote Control Many multiple-input audio interfaces require that you control the interface via software.

Microphones

When you need to record a voice or instrument, a real microphone—not a built-in mic or the one in a headset—is the only way to go. You have a couple of options in this regard. The most convenient is a microphone that plugs directly into your Mac's USB port; this type often doesn't require any additional software.

A variety of high-quality USB microphones are available from such manufacturers as Audio-Technica (www.audio-technica.com), Blue Microphones (www.bluemic.com), Marshall Electronics (www.mxlmics.com), Røde Microphones (usa.rodemic.com), and Samson (www.samsontech.com). They range in price from around $100 to $300. I reviewed a handful of these USB mics (macworld.com/4378) in July 2008.

Audio quality is, of course, your key concern, but there are other features to consider as well. For example, you'll avoid some cable clutter if you choose a microphone with a headphone port that lets you monitor not only the sound coming into the mic, but also your Mac's audio (useful when you're overdubbing a part). Marshall Electronics' USB.009 ($300 online) and Samson's G-Track (4½ mice; $130 online; macworld.com/3772) offer such a feature.

Having a control knob to adjust a USB microphone's input volume, or *gain*, is helpful in that it's less hassle than having to dig down into the Mac's System Preferences or an application's settings. Røde's Podcaster (3½ mice; $230 online; macworld.com/3772) and the previously mentioned USB.009 and G-Track allow you to control input gain.

But there are times when USB microphones and OS X 10.5 don't cooperate. When using a USB microphone, you may occasionally encounter bursts of static. To avoid this issue, try the following solution.

Launch Audio MIDI Setup (/Applications/Utilities). From the Audio menu, choose Open Aggregate Device Editor. In the sheet that appears, click on the plus-sign (+) button to add an aggregate device. In the Structure area below, enable the Use option next to the driver used by the USB microphone (USB Audio CODEC, for example). Enable the Clock option next to that device and click on Done. When you want to use that microphone, choose Aggregate Device as the input source—either within an application or from the Sound preference pane's Input tab.

Audio Interfaces

Alternatively, you can use a microphone with an XLR connector that plugs into a USB or FireWire interface. These audio interfaces, made by companies including M-Audio (www.m-audio.com), MOTU (www.motu.com), and Edirol (www.edirol.com), feature at least one audio input and, in some cases, MIDI in and out ports as well.

Audio interfaces generally require a separate software driver. Some include an application or preference pane for controlling the functions of the interface. For example, M-Audio's Fast Track

Ultra eight-port USB 2.0 interface ($350 online) requires that you open its preference pane within OS X's System Preferences to control the device's gain, pan, and output. I can control my older MOTU 828mkII audio interface either directly on the device or through the company's CueMix DSP application.

The advantage of these multiport interfaces is that you can use them to record multiple channels at once—a band full of instruments or even four people participating in a podcast's roundtable discussion (see our podcasting guide at macworld.com/4377 for more info). And recording multiple inputs at the same time doesn't require a high-end audio application—Apple's GarageBand will do the trick.

To do so, launch GarageBand and open its Preferences menu. Click on the Audio/MIDI tab and choose the audio interface in the Audio Input pop-up menu, and also choose it in the Audio Output pop-up menu if you want to monitor audio from the interface (GarageBand will automatically detect any devices connected to your Mac that have MIDI inputs).

Adjusting the Gain It's convenient to be able to control the input gain, as you can on a microphone such as the Samson G-Track.

Close GarageBand's preferences and choose Track: New Basic Track to create each new hardware instrument track. Then select a track and choose Track: Show Track Info. In the Info panel that appears, choose your first input from the Input Source pop-up menu. Continue selecting other tracks and choosing appropriate inputs for them. When you're ready to record, just click on the red icon next to each track to enable recording, and then click on the master Record button at the bottom of the window. GarageBand will record each enabled track separately.

Microphone Interfaces

Not everyone needs a large audio interface. Some people may object to the bulk and the expense, or they may find that they need just a single microphone input. A more portable option is a USB adapter that plugs directly into a microphone via an XLR connector. SoundTech offers the LightSnake Microphone to USB Cable ($40 online; www.soundtech.com), a 10-foot cable featuring a female XLR connector on one end and a USB connector on the other (no additional software required).

Regrettably, the LightSnake cable doesn't provide phantom power—the current that some microphones need in order to operate. CEntrance's MicPort Pro ($150 online; www.centrance.com) is a 24-bit, 96kHz USB mic preamp that provides 48V phantom power, and Blue Microphones' Icicle ($60 online) costs about half as much, but offers 16-bit, 44.1kHz audio only.

Off the Record

Interested in pulling samples from LPs or archiving precious record collections? Unlike other audio sources, turntables use a special kind of filtering—called an RIAA Equalization Curve—that requires audio to play through a device (a receiver or preamplifier) designed to deal with RIAA. The least expensive option is to locate an auxiliary output on a stereo receiver plugged into the turntable, and run a stereo RCA–to–mini-plug adapter cable between the receiver and the Mac's audio input port. Choose that input in the Sound preference pane and capture the turntable's output on your Mac.

Multitrack GarageBand Recording Choose a different input source for each GarageBand Real Instrument track.

Another option is Griffin Technology's $50 iMic USB Audio Interface (www.griffintechnology.com). Although you can use the iMic with just about any audio source, the Mac software included with it—Final Vinyl—is smart about the RIAA Equalization Curve.

Finally, you can eschew go-between boxes altogether by purchasing a USB turntable. Audio-Technica, Ion Audio (www.ionaudio.com), Sony (www.sony.com), and Numark (www.numark.com) offer ones at prices ranging from less than $100 to $300 plus.

Senior Editor **Christopher Breen** is a musician; he is also the host of the Macworld Podcast.

Help Desk

Mac OS X Hints

The insider tips you won't get from Apple **BY ROB GRIFFITHS**

iPhoto Thumbnail Tricks

Whether you use Apple's iPhoto '08 (★★★★; macworld.com/3061) or iPhoto '09 (★★★★; see our review on page 42), a couple of keyboard shortcuts will make working with your image thumbnails easier. If you want to resize the thumbnails, for instance, you don't have to grab the mouse and drag the slider. Instead, you can cycle between various preset sizes. In iPhoto '08, for instance, press 0 for tiny, 3 for small, and 2 for medium (see "Navigate iPhoto Thumbnails"). When you press 1, you'll see only one thumbnail at a time, and it will expand to fill the entire iPhoto viewing window. In iPhoto '09, press 0 for tiny, 3 for medium, and 1 for large thumbnails.

I usually like to see a lot of thumbnails at once and only switch to a larger size for closer inspection. But whether you're using the preset thumbnail sizes or the size slider, it's easy to move between thumbnails and views. For example, press the down arrow (or use your mouse) to highlight an image in your regular thumbnail view and then press the spacebar. The selected image will zoom to fill the available image area. Use the left and right arrows to move from image to image. When you're done, press the spacebar, and you'll then see your thumbnail view, at whatever size you previously set.

Navigate iPhoto Thumbnails It's easy to change the size of your iPhoto thumbnails without reaching for your mouse. In iPhoto '08, press 0 to make them tiny, 3 to make them small (as seen here), 2 to make them medium, or 1 to make one image fill your iPhoto window.

Export Text from All Stickies Notes

I track my actual to-do items in Apple's iCal, but I find that nothing beats Apple's Stickies when I just want to jot down ideas as they occur during the day. Stickies has improved over the years, but there's still one fairly major problem with the program: it's not easy to get your text *out* of it. There's a File: Export Text menu item, but this exports text from only one note at a time. What if you have 30 or 40 notes, and you'd like to get the text out of all of them?

Here's a fairly simple workaround. First, select File: Print All Notes. In the Print dialog box, click on the PDF pop-up menu and then select Save As PDF. In the new window that appears, name your file, pick a place where you want to save it, and then click on Save.

This will create a PDF file containing all your notes. You can leave your information like this if you want, but if you need to use the actual text, take one more step. Using Apple's Preview or Adobe Reader, open the PDF file you just created. Select all (⌘-A), copy to the Clipboard (⌘-C), switch to a blank document in TextEdit (or in a text editor of your choice), and finally paste (⌘-V). Save the resulting file, and you've got a

Have a Hint to Share?

Go to MacOSXHints.com to submit it. This column was based on tips from Michael Ball, Kirk McElhearn, Eric McMurry, Lucas Wall, and anonymous contributors. Each month, the author of our favorite tip receives the *Help Desk* mug.

MUG PHOTOGRAPH BY PETER BELANGER

text version of all your Stickies to use any way you please.

Remove Duplicate iCal Birthday Reminders

iCal's Birthdays calendar pulls birthday information from OS X's Address Book and displays it in a special read-only calendar in iCal. At times, though, it seems that iCal gets confused, especially if you're syncing information via Apple's $99-per-year MobileMe service (●●●½; macworld.com/3774). What I've found is that occasionally, and for no apparent reason, iCal creates two entries for every birthday. Although I realize the importance of not forgetting the birthdays of my contacts, I really don't need to see *two* reminders.

The temporary fix is quite simple. Select iCal: Preferences, and on the General tab, deselect the Show Birthdays Calendar option and then select it again. Presto—no more double birthday entries on the calendar. If you find that this doesn't work for a particular contact, make sure you don't have more than one Address Book entry for that person.

Set iChat Buddy List Shortcut Order

In the Leopard version of iChat, you can easily move between Buddy List windows for various accounts—such as your iChat account, your Bonjour account, and a Google Talk account—by using iChat's Windows menu. There you'll find ⌘-*key* shortcuts for each active account: ⌘-1 activates the first account's buddy list; ⌘-2, the second; and so on. But what you may not know is that you can control the order in which the accounts appear in this list. This means that if you use Google Talk most often, you can make its shortcut ⌘-1 and relegate Apple's iChat Buddy List to ⌘-2 or ⌘-3.

If you want to change the order of the items in this menu, open iChat: Preferences (⌘-comma [,]) and then click on Accounts. In the list on the left, click and drag to reorder the accounts however you wish. When you're done, close the Preferences window. Now check the Windows menu, and you'll find that the account you moved to the top of the list is shown first in the Buddy List section of the menu, too. It will also now be assigned the ⌘-1 shortcut.

Senior Editor **Rob Griffiths** runs the MacOSXHints.com Web site.

WHAT'S ONLINE

Serve Local Pages Via Name, Not IP Number A trick for Leopard's built in Web server (macworld.com/4320).

Downgrading Tips Avoid common pitfalls when downgrading programs (macworld.com/4321).

Use the Keyboard to Assign Finder Labels All you need is some AppleScript magic and a free utility (macworld.com/4379).

POWER TIP OF THE MONTH

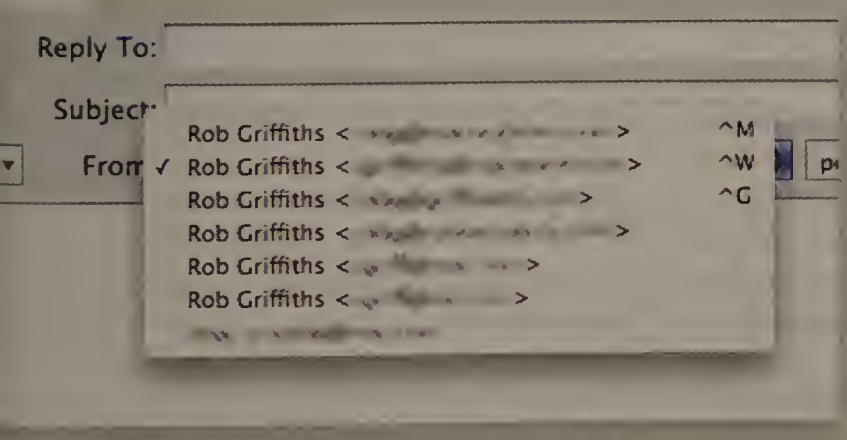
Switch Accounts with Shortcut

When I'm composing a new message in Mail, I can choose to send it from any of my many accounts by using the From drop-down menu in the New Message window. Until recently, I had to either reach for the mouse or use the tab and arrow keys to do that. But as of OS X 10.5 (Leopard), it's now possible to define shortcuts for each account.

Go to the Keyboard & Mouse preference pane and click on the Keyboard Shortcuts tab. Click on the plus sign (+), and in the sheet that appears, set the Application drop-down menu to Mail. In the Menu Title field, enter the details for the sending account. The trick is to make sure you specify the menu item *exactly* as it's formatted in Mail's From drop-down menu. Assuming that you used your full name when creating each account, this is the standard format for each entry in the menu:

```
Firstname Lastname <user@host.address>
```

Click in the Keyboard Shortcut field and then press your desired shortcut keys. To avoid conflicts with existing Mail keyboard shortcuts, I recommend including the control key, either alone or in combination with ⌘, option, or shift. For example, the shortcut for my *Macworld* account is control-W. When you're done, click on Add. Switch back to Mail, press ⌘-N to start a new message, and press one of your newly defined keyboard shortcuts. (As of Leopard, you no longer have to quit and restart a program when you assign custom shortcuts.) The From drop-down menu should change to the chosen account. The menu will even show you your shortcuts, in case you happen to forget them (see "Easy Mail Shortcuts"). As an added bonus hint, it turns out that you can use this same technique to create keyboard shortcuts for Mail's SMTP Server menu and its Signature drop-down menu. So if you use a lot of signatures, you can easily keep your most-used options no more than a keyboard shortcut away. Just remember to precisely match what you see in the menu in the Keyboard Shortcuts panel.



Easy Mail Shortcuts Use the Keyboard Shortcuts tab of the Keyboard & Mouse preference pane to create keyboard shortcuts for each e-mail account you use for sending messages in Mail. After you do, your shortcuts will appear in the From drop-down menu, as you see here.

ICON BY PAUL HOWALT

Mac 911

Solutions to your most vexing Mac problems **BY CHRISTOPHER BREEN**

Error-Proof E-mail Attachments

Q: I'm a photographer and need to e-mail photos to other people, many of whom are Windows users. When I do this with Apple's Mail, most Windows users can see the pictures but can't save the attachments. Is there something I can do to ensure that Windows users can download my photos as separate attachments?

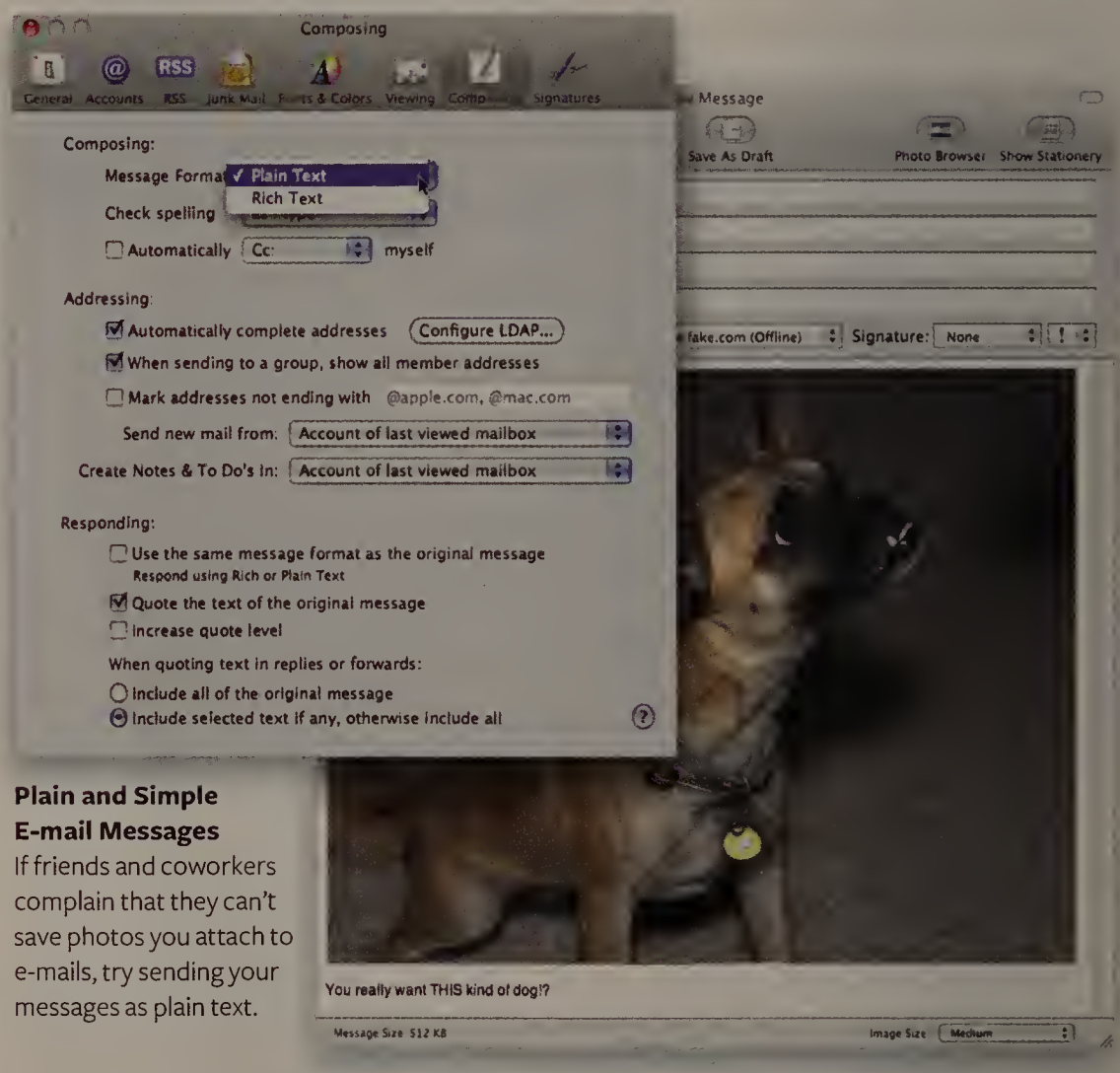
Dennis Ducklow

A: This one crops up at just about every user group meeting and family holiday dinner I attend. There are two things you can try—the first *might* work, and the second is guaranteed.

First, when you send a message that has photos attached, format the message as plain text, not rich text. To do so in Apple's Mail, create a new message and choose Format: Make Plain Text.

To make plain text the default (which we old-timers love because we like our e-mail messages unadorned with fancy fonts and formatting), choose Mail: Preferences, click on the Composing tab, and choose Plain Text from the Message Format pop-up menu. From this day forward, your messages will be sent as plain text by default (see "Plain and Simple E-mail Messages"). Should you wish to send the occasional rich-text missive, choose Format: Make Rich Text.

If this doesn't work (and it doesn't always), here's a surefire way to get those attachments through. Compress your images into a .zip archive and attach that archive to your message. Select your image (or multiple images) in the Finder and choose File: Compress *filename* (where *filename* is either the name of a single file or the number of selected files). Your Mac will create a .zip archive of your image(s). Drag that file to your e-mail message and send it. Your Windows pals will receive the file as an attachment and will need only to expand the file to view its contents.



Plain and Simple E-mail Messages
If friends and coworkers complain that they can't save photos you attach to e-mails, try sending your messages as plain text.

Have a problem?
Go to the Mac 911 forum (macworld.com/2467) for help with your misbehaving Mac or applications.

Norton AntiVirus Begone!

Q: How do you get rid of Norton AntiVirus? I'm convinced that it crashes my MacBook regularly and makes it slower than a telephone modem.

Thom Gifford

A: To uninstall Symantec's Norton AntiVirus 11 for Mac (4½; macworld.com/4307), open the Applications folder at the root level of your hard drive (not the one in your user folder), find the Symantec Solutions folder, and open it. Launch the Symantec Uninstaller within, choose the option to remove the Norton AntiVirus program, and then click on Uninstall. Follow the Uninstaller's directions. Restart your Mac, and the program should be gone.

If you have an older version of the program, consider upgrading. We found version 11 to be *much* less of a resource hog than older versions. To remove version 10, visit Symantec's support page (macworld.com/4308), download the Symantec Uninstaller, run it, select Norton AntiVirus as the application to remove, and click on Uninstall. Kenyon College, in Gambier, Ohio, provides a nice set of instructions and utilities for removing Norton AntiVirus 8 and 9. You can see the details on Kenyon's Library and Information Services Web site (macworld.com/4309).

But in all fairness, it very well might not be your antivirus software that's causing your problems. If you still find yourself having trouble after upgrading or uninstalling Norton AntiVirus, take a look at our Leopard Troubleshooting Guide (macworld.com/3552).

Do You Even Need Antivirus Software?

Q: When I purchased my Mac, I was told that getting a virus on a Mac is unlikely and that I didn't need protection. What do you recommend?

Terry Holt

A: I've chosen to do without antivirus software on my Mac, and I've yet to regret that decision. But I do try to practice safe computing. That means I don't click on questionable links in e-mail messages I receive or Web sites I visit. I also download my software from trusted sites such as VersionTracker (www.versiontracker.com) and MacUpdate (www.macupdate.com) or directly from a developer's Web site. I also try to stay informed about what is and isn't a threat on the Macintosh. Here's a brief rundown.

Viruses are programs that earn their name by their ability to replicate themselves, locally and often across a network. Many viruses attach themselves to other programs. When you launch one of these programs, the virus code launches as well and the virus goes about its nefarious business. Viruses are commonly found in the Windows world but are exceedingly rare on the Mac.

A *Trojan horse* promises one thing but delivers another. For example, you download a program that promises to cure male pattern baldness, but when you run this miracle worker, the contents of your computer are instead beamed to an underground data center in Kamchatka. If you obtain software from reliable sites, you're unlikely to get a Trojan horse.

Adware has an embedded advertising component—one that displays or downloads ads when you run the software. Some adware is legitimate—part of the price of using a "free" program such as the Iconfactory's Twitterrific or Qualcomm's Eudora, for example.

Spyware grabs data from your computer and often uses it for the purposes of evil—sending personal information to a baddie or, when you're using your Web browser, redirecting you to sites you don't want to visit.

In order for the worst forms of adware and spyware to work, the operating system must allow unrestricted access to its more sensitive parts. The Mac OS doesn't, so adware and spyware are not currently something for Mac users to worry about.

Phishing schemes, on the other hand, are fraudulent offers or warnings that arrive via e-mail or instant message. They demand that you provide credit card, social security, password, or bank account information in order to maintain an account or service or confirm a transaction. Anyone—regardless of operating system—can fall victim to a phishing scheme; but to thwart it, all you need to do is avoid taking the bait. Reputable outfits that hold your personal data never demand this kind of information in the form of an e-mail message.

I may not use antivirus software on my Mac, but you can be sure I do when I run Windows on my Mac. If you use Apple's Boot Camp or virtualization tools such as Parallels' $80 Parallels Desktop for Mac (3½; macworld.com/4299) or VMware's $80 VMware Fusion (4½; macworld.com/4300), make sure you run Windows antivirus software. To get some

ICONS BY PAUL HOWALT

Bugs & Fixes BY TED LANDAU

Blurry Photos after iPhone 2.2 Update Many iPhone owners have complained about a bug in the iPhone 2.2 Update that affects image display. It notably affects photos received as e-mail attachments. When viewed in Apple's Mail, an attached image appears fine. But if you save the image and then view it in the Photos app, the photo appears blurred. The problem is with how an image displays in the iPhone's Photo app, not with the image itself. It seems to be limited to certain image types (for example, pictures taken with the iPhone). What is clear is that this will be an annoying problem for anyone who attempts to e-mail an iPhone photo to another iPhone user. We'll have to wait for an Apple update to resolve the issue.

Safari 3.2 Crashes Plagued by Safari crashes? One cause probably accounts for the vast majority of complaints: Safari add-ons, such as Mike Solomon's $10 ad-blocker, PithHelmet (www.culater.net), and Pozytron.com's free Safari search enhancer, AcidSearch (www.pozytron.com). Apple no longer supports these types of add-ons (technically called *input managers*). And while they may still work for now, don't assume they'll continue to work smoothly. In particular, when Apple updates Safari, it pays little or no attention to whether the update may break the ability of existing input managers to work. The immediate fix is to remove the problem tool from *youruserfolder*/Library/InputManagers. With luck, the add-on's developer will release an update, as Solomon has for PithHelmet. The best long-term solution is to give up on input managers altogether.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com). Share your problems at bugs@macworld.com or on Macworld.com's Mac 911 forum.

software suggestions and to learn about some programs that can help you avoid passing on infected e-mails to your Windows-using friends, take a look at the article "Mac Security: Antivirus" (macworld.com/4310).

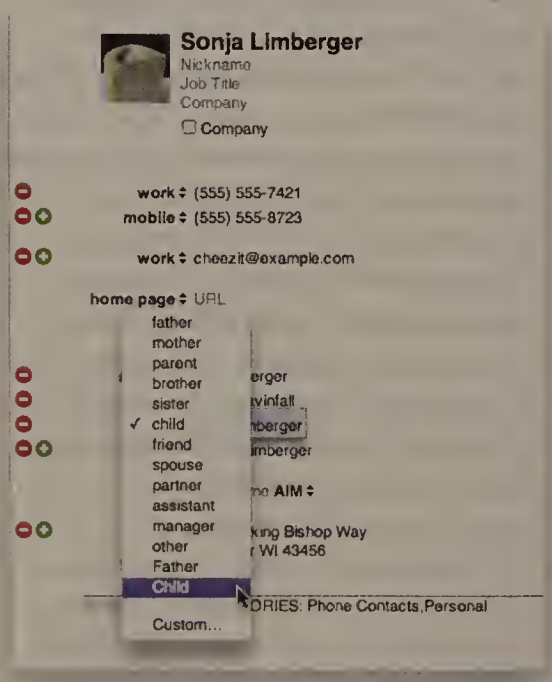
Remove Unwanted Names from Address Book Labels

Q: When I print labels with Address Book, it automatically adds the names of spouses and children from their respective fields, making the first line of the mailing label so long and the text so small (due to automatic sizing) that the labels are useless. Is it really supposed to work this way?

Via the Internet

A: Apparently so. The idea is that if you've taken the trouble to add a contact's family members, it's likely that you'll want to address the entire clan on an envelope or mailing label. That's fine for personal correspondence or holiday cards, but less than ideal for business correspondence. Fortunately there are a couple of ways you can work around this.

The more tedious way is to create a separate card for each family member whom you *don't* want to appear on the label and either assign no address to that contact or assign an address different from the one for the related contact. For example, if you don't want Shiloh, the kid of Sheila Jones at 123 Main Street, to appear on the list, create a separate contact for Shiloh Jones of 321 Main Street. As I said, tedious.



Change Address Book Relations Want to avoid long printed labels that include the name of every member of a contact's family? Create a custom relation entry in Address Book and *capitalize* the word—for example, type **`Child`** instead of **`child`**.

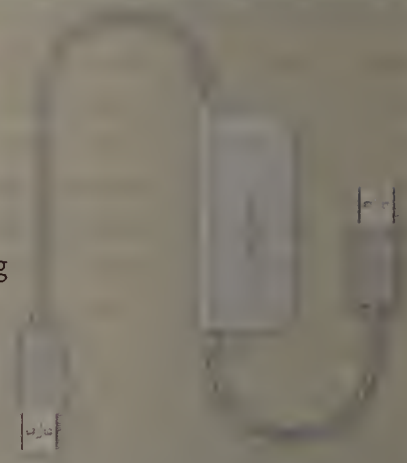
I recommend instead opening the contact in Address Book, clicking on the Edit button, clicking on the relation entry (child, father, or spouse, for example), and then choosing Custom from the pop-up menu that appears. In the resulting Add Custom Label sheet, enter a new relation entry but capitalize the first letter—**`Child`** rather than **`child`**, for example (see "Change Address Book Relations").

The trick here is that Address Book adds relations to envelopes and labels only if they're the original lowercase names that Apple built into Address Book. Create a new name with the first letter capitalized, and the program no longer recognizes it as a relation and therefore won't spackle it onto your envelopes and labels.

Senior Editor **Christopher Breen** is the author of *The iPod and iTunes Pocket Guide*, fourth edition, and *The iPhone Pocket Guide*, third edition (both Peachpit Press, 2008).

TOOLS OF THE TRADE

Help Someone Make a Smooth PC-to-Mac Transition



I recently helped a beloved aunt move from a PC running Windows XP to a new iMac. To prepare for the operation, these are the tools I packed:

A Portable USB Drive Sometimes the quickest way to move files from a PC to a Mac is to jack an external hard drive into the PC via the USB port, copy the files you want, attach the drive to the Mac, and drag the files to the Mac's drive. In order for this to work, you must format the external drive as an MS-DOS (FAT) disk. To do so, connect the drive to your Mac, launch Disk Utility (/Applications/Utilities), select the drive in Disk Utility, click on the Erase tab, choose MS-DOS from the Volume Format pop-up menu, and click on Erase. This reformats the drive so both a PC and a Mac can use it.

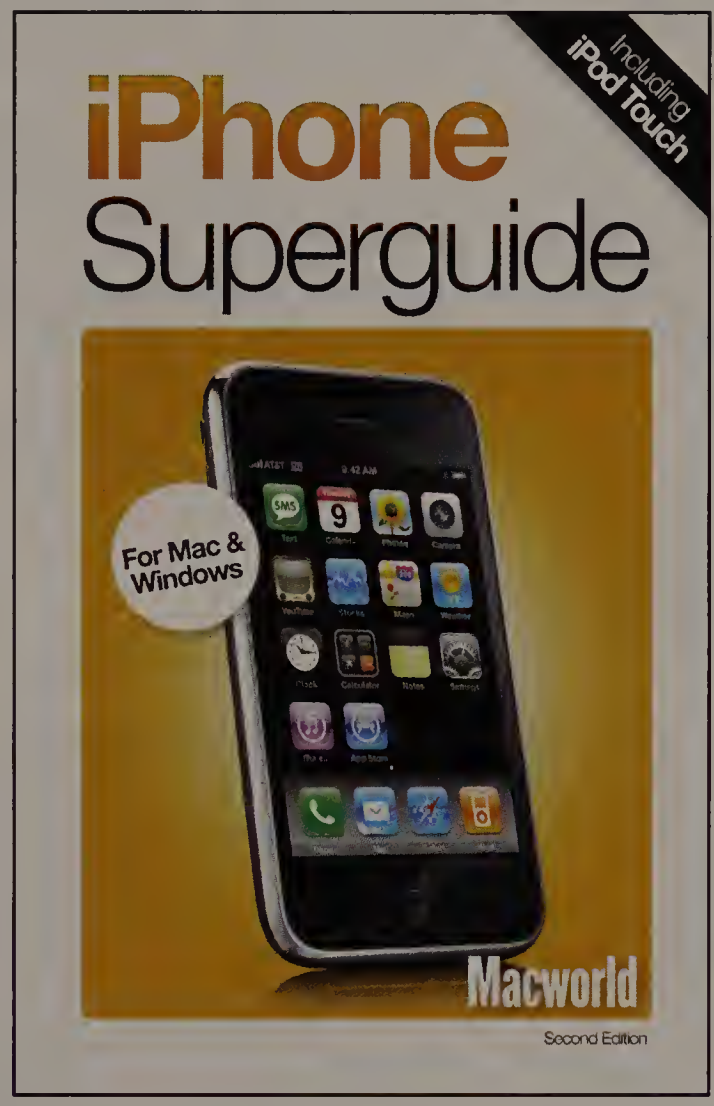
The hitch with this method is that unless you have fairly intimate knowledge of Windows, you may not know where to find all the files and settings you need—for example, e-mail archives, Internet Explorer Favorites (that's "bookmarks" to you and me), and wallpaper.

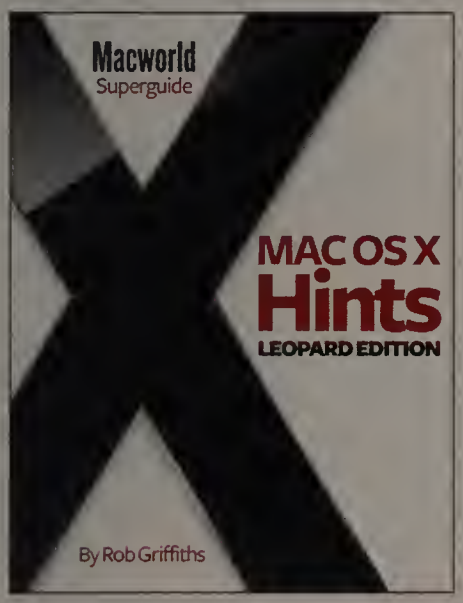
An Ethernet Cable If you don't have an external hard drive to spare, you can create a quick-and-dirty network between the Mac and the PC by stringing a cable between the computers' Ethernet ports, enabling file sharing on both computers, and copying the files you want from PC to Mac. (Each computer's Help system will tell you how to create the network and share files.) But again, if you don't know where to find all the files you need, you may miss some important ones.

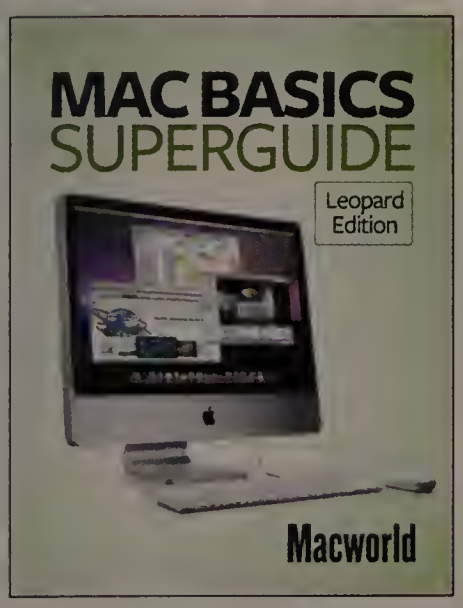
Belkin's Switch-to-Mac Cable The slow USB 1.0 port on my aunt's ancient PC refused to recognize the external hard drive and, try as I might, I couldn't make the Mac and the PC talk to each other over a network. So I turned to Belkin's $50 Switch-to-Mac Cable (macworld.com/4311), and it performed brilliantly. You have to install Belkin's included software on both the PC and the Mac (it requires Windows XP or Vista, and Mac OS X 10.4 or later) and connect the cable to the USB port on each computer. The device moves music, pictures, documents, e-mail, contacts, events, wallpaper, Internet Explorer Favorites, the contents of the desktop, and the contents of any folder of your choosing. It's dead simple to use and it's thorough. This one will remain in my switcher toolbox from here on out.

ICONS BY PAUL HOWALT

Macworld Superguides







Staying true to our goal to offer you the most comprehensive coverage of the most innovative and exciting new products, we introduce the Macworld Superguide series. These books are produced by the Macworld staff and are packed with practical how-to's, in-depth features, tips and tricks, and more.

Macworld Superguides are available in 3 convenient formats: 1) Downloadable PDFs: Get immediate access. 2) Printed Book: Order a handy, full-color printed book on high-quality paper. 3) PDF on CD-ROM: Don't want to download the PDF, get it on CD-ROM.

ORDER NOW!

www.macworld.com/superguide

Amp Up Your

Crank up your savings! Max out your Mac! Pump

Authorized Reseller

SAVE $100! 15.4" MacBook™ Pro 2.4GHz
with 250GB Hard Drive and 2GB SDRAM
$100 Cash Back!* FREE Parallels Desktop!*
$1994 - $100 mail-in rebate* = **$1894!** #7684020
*After mail-in rebate. See below for details.

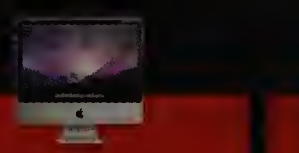
SAVE $544!
15.4" MacBook Pro 2.4GHz
with 200GB Hard Drive
FREE Parallels Desktop!*
original price $1994
~~$1599.00~~ **$1449!*** #7691239
*After rebate. See below or call for details.

SAVE $544!
13" MacBook Air 1.6GHz
with 80GB Hard Drive
FREE Parallels Desktop!*
original price $1794
~~$1249.00~~ **$1149!*** #7373085
*After rebate. See below or call for details.

SAVE $100!
17" MacBook Pro 2.66GHz
with 4GB SDRAM and 320GB HD
FREE Parallels Desktop!*
~~$2794~~ **$2694!*** #7732924
*After rebate. See below or call for details.

SAVE $50!
13" MacBook™ 2.0GHz
with 160GB Hard Drive
FREE Parallels Desktop!*
~~$1294~~ **$1244!*** #7684018
*After rebate. See below or call for details.

SAVE $50!
13" MacBook™ Air 1.6GHz
with 120GB Hard Drive
FREE Parallels Desktop!*
~~$1794~~ **$1744!*** #7684027
*After rebate. See below or call for details.



SAVE $50!
20" iMac® 2.4GHz
with 250GB Hard Drive
FREE Parallels Desktop!*
~~$1194~~ **$1144!*** #7497733
*After rebate. See below or call for details.

SAVE $50!
13" NEW MacBook™ White 2.0GHz
with 2GB SDRAM and 120GB HD
FREE Parallels Desktop!*
~~$994~~ **$944!** #7739823
*After rebate. See below or call for details.

SAVE $79.99!
Parallels Desktop 4.0 for Mac
~~$79.00~~ **FREE!** #7698276
Price after $60 MacMall and $20 mfr. mail-in rebates with purchase of Apple computer. Final net cost to you is $79.99. Ends 3/31/09.†

SAVE $35!
Microsoft Office 2008 for Mac
Home and Student Edition
list price ~~$149.95~~
now **$114.99!** #7352258

SAVE $29.99!
TuneRanger
~~$29.99~~ **FREE!** #7364568
FREE after $30 mfr. mail-in rebate with iPod classic, iPod nano or iPod shuffle purchase. Price before rebate is $29.99. Ends 3/31/09.†

SAVE $31!
VMware Fusion 1.0 for Mac
with FREE Upgrade to 2.0
original price $65.95
~~$34.00~~ **$4.99!*** #7721087
*After rebate. See below or call for details.

SAVE $20!
Apple Mac Box Set
Includes Mac OS X v10.5 Leopard, NEW iLife '09 and NEW iWork '09
~~was $169~~
$148.99! #7732917

15.4" MacBook Pro Sleeve
Pure Silver
Soft touch velvet fabric interior!
only **$17.99!** #7048241

SAVE $10!
Commute 13.3" Laptop
and Document Shuttle
~~was $19.00~~
now **$9.99!** #7662810

SAVE $81!
X223Wbd
22" Widescreen LCD
~~was $247.00~~
now **$166.98!** #7484467

SAVE $100!
ML-1630 Monochrome
Laser Printer
~~$149.00~~ **$49.99!** #7383624
Price after $100 mfr. mail-in rebate with purchase of any Apple CPU. Ends 3/15/09.

1TB Big Disk Extreme
Triple Interface Hard Drive
FireWire 800/400 and USB 2.0
only **$168.99!** #7274662

Source code: MACWORLD

*WE'LL BEAT ANY PRICE ON ANY APPLE BRAND PRODUCT or competitive promotion on any Apple brand product. We may require proof of dealer's pricing. Competitor must be an Apple Authorized Reseller. Product must be in stock at the competition. Advertised item must be identical to the one offered by MacMall and must be a new item in a factory sealed box. We reserve the right to limit quantity ordered. This offer does not apply to special, bonus or free offers, grand openings, special purchases or special buys, manufacturer's rebates, closeouts, clearances or to dealers' one-of-a-kind or other limited quantity offers. Nor does it apply to advertising errors made by any authorized dealer. Not open to dealers. Void where prohibited. Sorry, offer not valid in conjunction with other rebate offers. On multiple-item quotes: "We'll Beat Any Price" applies to the price of the entire order, not individual line items. Offer applies to pre-taxed prices only. Offer valid only at time of purchase, not after the fact. • UP TO $200 CASH BACK OFFER-Get up to $200 Cash Back via MacMall mail-in rebate with purchase of select computer models. Ends 3/15/09. • FREE PARALLELS DESKTOP 4.0 OFFER-Get Parallels Desktop 4.0 for Mac (#7695276) FREE after $20 mfr. and $60 MacMall mail-in rebates with purchase of any

Stuff!™

up your iPod!

6 Months Same as Cash!
Offer valid for purchases over $500. Call for details.

Up to $200 Cash Back!*
On Apple Computers. After mail-in rebate. See below.

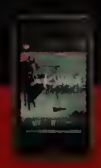
FREE Parallels Desktop!*
After mail-in rebate with purchase of an Apple computer. See below.

MacMall

Call 1-800-321-7532 or visit macmall.com

Your #1 Apple Superstore!

SAVE $25!
Mac mini 1.83GHz with 80GB Hard Drive
FREE Parallels Desktop!*
~~$594~~ **$569!*** #7288184
*After rebate. See below or call for details.



iPod touch 8GB
FREE Engraving!*
FREE Charger!*
only **$224!** #7661971
*After rebate. See below or call for details.

iPod classic 120GB
FREE Engraving!*
FREE TuneRanger!*
FREE Charger!*
only **$244!** #7661967
*After rebate. See below or call for details.

iPod nano 8GB & 16GB
FREE Engraving!*
FREE TuneRanger!*
FREE Charger!*
8GB only **$144!** 16GB only **$194!**
*After rebate. See below or call for details.

iPod shuffle 1GB & 2GB
FREE Engraving!*
FREE TuneRanger!*
FREE Charger!*
1GB only **$46.48!** 2GB only **$69!**
*After rebate. See below or call for details.

roxio

Toast 10 Titanium
~~$83.98~~ **$63.99!** #7730648
#7730647 Toast 10 Pro ~~$123.98~~ **$103.98**
After $20 mfr. mail-in rebate when you upgrade or switch. See below for details.†

Adobe

Photoshop Elements 6 for Mac
Easy photo enhancement!
only **$74.98!** #7373571

BELKIN

SAVE $12!
Rockstar 5-Port Multi-Headphone Splitter
was ~~$21.99~~
only **$9.99!** #7490977

SDI TECHNOLOGIES

SAVE $30!
iHome Clock Radio and Audio System for iPod
was ~~$99.98~~
now **$69.98!** #7507941

CABLES

SAVE $10!
Zipling Retractable Car Stereo Cable
originally ~~$19.99~~
only **$9.99!** #7010159

Apple iWork™ '09
Get to work—but have fun doing it!
only **$74!** #7732910

Apple 500GB Time Capsule
Automatic wireless backup for your Mac!
only **$294!** #7373106

GRIFFIN

SAVE $11!
PowerBlock AC Charger for iPod and iPhone
was ~~$21.99~~
now **$10.99!** #710319

Targus

Bluetooth Laser Mouse for Mac
Smooth 4-way touch scrolling at your fingertips!
only **$61.99!** #7668525

LACIE

SAVE $32!
500GB Rugged Hard Drive
FireWire 800/400, and USB 2.0
was ~~$179.99~~
now **$147.99!** #7505442

new Intel-based Apple CPU. Price before rebates is $80. Ends 3/31/09. • FREE ENGRAVING OFFER-Get select iPod touch, iPod classic, iPod nano and iPod shuffle models engraved for FREE when you purchase them through MacMall. No rebate required. There is a $9.99 charge for select iPods. Call or visit www.macmall.com/myipod to place your order. • FREE TUNERANGER OFFER-After $30 mfr. mail-in rebate with the purchase of an iPod classic, iPod shuffle or iPod nano. Price before rebate is $29.99. Offer not valid on for iPod touch. Ends 3/31/09. • FREE CHARGER OFFER-After $9.99 mfr. mail-in rebate with purchase of iPod. Price before rebate is $9.99. Offer ends 3/15/09 • ROXIO TOAST 10 Titanium Pro OFFER-Get a $20 mfr. mail-in rebate when you upgrade your current copy of Toast or make the switch from any previous retail boxed version of a CD/DVD burning product. Prices before rebate are $123.99 (#7730647) and $83.99 (#7730648). Offer ends 3/31/09. • VMWARE FUSION OFFER-Switch to VMWare Fusion and receive a $30 mfr. mail-in rebate. Price before rebate is $34.99. Ends 3/31/09 • ALL OFFERS VALID ONLY WHILE SUPPLIES LAST. †For rebate terms and conditions, please visit our Web site and enter the applicable part number. Download rebate coupons at www.macmall.com/rebates.

Other World Computing

Serving the Mac Universe since 1988

Visit: **www.macsales.com** or Call: **800.275.4576**

Products That Make Your Mac® Faster and Better

McAfee SECURE · Gold Service · 5th Year In a Row! BizRate 2008

www.macsales.com

At OWC Our Customers Come 1st!

Quality Products · Competitive Prices · Expert Support

More Memory = Faster Mac

Use our online memory guide at www.macsales.com/memory

Apple® Mac Pro XEON™ – Max any model up to 32GB!

Get the right memory for any 2006/2007/2008 Model

As low as **$23.00** per GB

Detail of Apple-Qualified OWC heat spreaders for Mac Pro Quad Xeon.

1GB Module Kits for up to 8GB · 2GB Module Kits for up to 16GB · 4GB Module Kits for up to 32GB MAX!

4GB Kit (2GB Modules x 2) from **$92.99**

32GB Kit (4GB Modules x 8) from **$979.99**

Upgrade: • 667MHZ & 800MHZ Models • 2.0GHz, 2.66GHz, 2.8GHz, 3.0GHz, and 3.2GHz Quad-Core, Quad Core x 2 (8-Core) – *all models*

Memory for iMac, MacBook, MacBook Pro, Mac mini (Intel)

2.0GB from **$26.99** · 4.0GB Kits from **$49.99** · 6.0GB Kits from **$189.99**

NEW! 8.0GB Kits *(for 2009 "Unibody" 17" Only)* **$699.99**

Up to $50 Cash Back Per Apple Factory FB-DIMM Set! See www.macsales.com/money-back-rebate for details.

We have the right memory for your Mac

From 68020 to PPC to Intel®, From Classic to Pro--OWC has the Right Memory for all the Latest Macs and nearly Every Mac!

Free Step-by-Step Do It Yourself Installation Videos: It's easy to add memory and free step-by-step OWC Online Videos show you how! **www.macsales.com/install-videos**

Our online guide makes getting that right memory for your Mac easy.

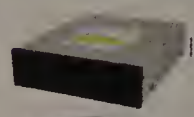
www.macsales.com/memory

All OWC memory meets or exceeds manufacturer specifications for maximum quality assurance, but at the independent prices you can afford. Plus, you receive the industry-leading Lifetime Advance Replacement Warranty and award-winning US-based customer support.

Mac SuperDrive DVD+CD Burning Solutions

Create with Apple iDVD®, Apple DVD Player, Apple DVD Studio Pro®, Apple iMovie®, Apple Disc Burner, EMC® Retrospect®, Apple iTunes®, Roxio® Toast®, Apple iPhoto®, Prosoft, and NTI™ Dragon Burn.

www.macsales.com/superdrives



Internal Solutions from **$27.99**

External Solutions from **$71.99**

Blu-ray Solutions now from **$114.99**

OWC Mercury Pro Blu-ray Burner/SuperDrive Dual-Layer w/Roxio Toast only **$479.99**

FireWire® 800/400+USB2.0+eSATA *'The First and Only Quad Interface' Performance Optical Salution*

Up to $25 Cash Back For Your Working Optical Drive! See www.macsales.com/optical-drive-rebate for details.

Your Online Mac Upgrade Center

SATA Internal Hard Drives

www.macsales.com/harddrive

HITACHI · Seagate Premier Partner

3.5" SATA drives for Mac desktops/towers

Up to 2.0TB drives *NOW IN STOCK!*

500GB from **$64.99**

PATA/IDE Also Available!

2.5" SATA drives for most 2006 and later Apple & PC laptops including MacBook® Pros

Up to 500GB 5400RPM; Up to 500GB 7200RPM

320GB now from **$69.99**

USB 2.0 Universal Drive Adapter™

www.macsales.com/newertech

The Swiss Army Knife of Disk Connectivity

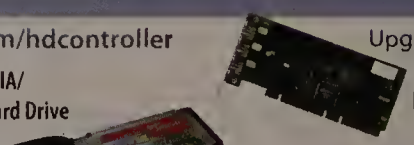
Access data/transfer files from ANY 2.5", 3.5", and 5.25" drive with fast, Plug and Play ease!

only **$29.99**

Controller Cards

www.macsales.com/hdcontroller

IDE/ATA & SATA PCI/PCMCIA/ Express34/PCI-Express Hard Drive Controller Cards for Macs Starting from **$18.99**



Upgrade/Add FireWire 800 to G3/G4/G5 Power Macs

FireWire 800 PCI/PCI-X Special **$22.95**

Add More, faster drives to your Mac

IDE/ATA/SATA Controller Cards from **$55.00**

NewerTech® Products

www.macsales.com/newertech

OWC® is proud to be the #1 distributor of NewerTech products

NewerTech Voyager™

NEW!

SATA I/II Hard Drive Docking Solutions

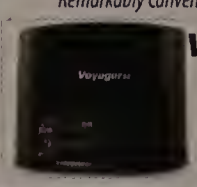
The Easiest Way To Access Data From ANY 2.5" or 3.5" Serial ATA (SATA) Hard Drive Up To 2.0TB!

- Fully bootable external drive solution.
- Swap drives at will.
- Plug and Play with all connector cables included.

MacHynet.it BEST OF EXPO MWSF 2009

Voyager Q FW800/400/ USB 2.0/eSATA only **$99.95**

"Remarkably Convenient" - Macworld



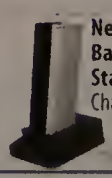
Voyager S2 USB 2.0+eSATA only **$59.99**

NuPower® Batteries for Apple Laptop and iPod®

The highest capacity replacement batteries for PowerBook and iBook PERIOD! from $89.99

*** Battery capacity gains are compared vs. original Apple factory included battery

from $19.99



NewerTech Intelligent Battery Charging Station 2-Bay Battery Charger + Conditioner. from $149.95

NewerTech 11 Piece Portable Toolkit

Everything you need to service/upgrade desktop and notebook computers as well as small consumer electronics devices like iPods.

only **$17.95**

Featured Software

www.macsales.com/software

Award Winning Prosoft Utilities

Drive Genius 2

Maintain, manage, optimize, and repair your hard drive.

for **$59.99**

PROSOFT engineering inc.

Data Rescue II

The best data recovery utility on the market for recovering files from a problem hard drive.

for **$59.99**

Other World Computing · DISCOVER · MasterCard · VISA · JCB · PayPal · School/Corporate Purchase Orders accepted with approved credit.

Backed By Insanely Great Service & FREE lifetime Support

800.275.4576

Learn more about OWC's new 'Green' Headquarters.
Conservation & Recycling for a greener tomorrow
http://www.macsales.com/LEED/

Special Additional Savings!
Competitive Pricing + Additional Cash Back!
See offers: www.macsales.com/Rebates

Customer Quote CORNER

"I recommend your company to friends on a constant basis: I thought it was just because of your expert expediting... Not so – it's also your PEOPLE!"

- Michael D., Toronto, ON, Canada

External Storage Solutions

Software Included $200 Value

All OWC & NewerTech configured external drive solutions come ready to Plug and Play with all interface connection cables, include full versions of Intech® HD Speedtools™, NovaStor NovaBACKUP, and Prosoft Data Backup 3, and are Leopard® Time Machine™ ready.

Award Winning Solutions from OWC & NewerTech – Quality, Performance, Reliability make OWC & NewerTech storage a world apart.
Visit www.macsales.com/storage for all available options.

Intech PROSOFT

USB eSATA

Sleek, Fast, and Fully Plug and Play!

OWC Mercury Elite-AL Pro™

3 Year Solution Warranty

All Mercury Elite-AL Pro™ models are ideally configured for audio/video, digital photography, professional music, graphics, general data and backup applications.

CPU REVIEW 4.5 out of 5

Available from 80GB to 2.0TB!

FW400+USB 2.0 | FW800/FW400/USB 2.0/eSATA

Size	Speed	Data Buffer	FW400 +USB 2.0	FW800/FW400/ USB 2.0/eSATA
320GB	7200RPM	16MB	$97.99	$127.99
500GB	7200RPM	16MB	$109.99	$139.99
1.0TB	7200RPM	16MB	$154.99	$184.99
1.0TB	7200RPM	32MB	$179.99	$209.99
1.5TB	7200RPM	32MB	$229.99	$259.99

OWC Mercury Elite-AL Pro Qx2™

3 Year Solution Warranty

NEW! Quad Interface

Selectable Hardware RAID 0, 1, 5, 10 & span modes. Sustained data transfer rates up to 230MB/s. Perfect for A/V, HD-video, redundant backup, & more!
Up to 8.0TB, Starting from **$699.99** for 2.0TB

USB eSATA

Available from 1.0TB to 8.0TB!

FireWire 800/400, USB 2.0, eSATA 'Quad-Interface'

OWC Mercury Rack Pro™

4 Bay, 1U Rack Solutions

Available from 640GB to 8.0TB!

NEW! Quad Interface

JBOD or Hardware RAID options 0, 1, 5, 10 available!
Up to 8.0TB of Performance RAID/ RAID-READY storage from **$499.99**

USB eSATA

FireWire 800/400, USB 2.0, and/ar eSATA interface madels

2 Year Standard Solution OR 5 Year Enterprise Solution Warranty

NEW! Quad Interface

USB eSATA

Performance Hardware RAID Plug and Play Solutions

OWC Mercury Elite-AL Pro Dual Drive RAID

3 Year Solution Warranty

RAID-0 Striped Solutions ideal for demanding audio/video, editing, data processing, and any application where higher performance provides a benefit.

NEW FireWire 800/400+USB 2.0+eSATA 'Quad Interface' Models!

Size	Speed	Data Buffer	FW800/FW400 +USB 2.0	FW800/FW400/ USB 2.0/eSATA
1.0TB Striped	7200RPM	32MB	$229.99	$259.99
1.5TB Striped	7200RPM	64MB	$299.99	$339.99
2.0TB Striped	7200RPM	64MB	$379.99	$419.99
3.0TB Striped	7200RPM	64MB	$449.99	$479.99

OWC Mercury On-The-Go Pro™ Portable Solutions

USB

Fast, Reliable, Bus-Powered Plug and Play

Macworld "...perfarms at same of the fastest speeds we've seen in a partable drive." - Macwarld

Compact and versatile—powers right away via FireWire or USB 2.0 interface, no external power required!

Available from 80GB to 500GB!

3 Year Solution Warranty

Size	RPM Speed	Cache	USB 2.0 Only	FW400 +USB 2.0	FW800/400 +USB 2.0
120GB	5400	8MB	$74.99	$95.99	$114.99
250GB	5400	8MB	$87.99	$107.99	$127.99
320GB	**5400**	**8MB**	**$97.99**	**$119.99**	**$139.99**
500GB	5400	8MB	$147.99	$167.99	$187.99
Fastest 7200RPM Bus-Pawered Salutians On the Market					
250GB	7200	16MB	$97.99	$119.99	$139.99
320GB	7200	16MB	$119.99	$139.99	$142.99
500GB	**7200**	**16MB**	**$179.99**	**$199.99**	**$219.99**

NewerTech Guardian MAXimus®

"A Sweet, Virtually Problem-Free Back-up Strategy." - MyMac.com

USB eSATA

Hardware RAID 1 (Mirror Redundant) Plug and Play Ready

FW800/FW400+USB 2.0 RAID-1 MIRROR

Available from 250GB+250GB to 2.0TB+2.0TB!

Provides "Live Activity" backup/data redundancy of your critical data.

3 Year Solution Warranty

Size	Speed	Data Buffer	FW800/FW400 +USB 2.0
500GB+500GB (Mirrored) Drives	7200RPM	32MB	$239.99
750GB+750GB (Mirrored) Drives	7200RPM	64MB	$329.99
1.0TB+1.0TB (Mirrored) Drives	7200RPM	64MB	$395.99
1.5TB+1.5TB (Mirrored) Drives	7200RPM	64MB	$499.99

NewerTech miniStack®

USB eSATA

Powered Hub

Up to 2.0TB of performance storage + integrated space saving powered FW/USB 2.0 hub!

3 Year Solution Warranty

Convenient rear & side ports!

Size	Speed	Data Buffer	FW400+USB 2.0	FW800/FW400/ USB 2.0/eSATA
250GB	7200RPM	16MB	$114.99	$135.99
320GB	7200RPM	16MB	$117.99	$139.99
500GB	7200RPM	16MB	$129.99	$154.99
1.0TB	7200RPM	16MB	$174.99	$199.99
1.0TB	7200RPM	32MB	$199.99	$224.99
1.5TB	7200RPM	32MB	$249.99	$279.99

NewerTech NuCube™

Make your Mac mini really stand out on your desktop!

NEW!

only $37.99

OWC Mercury Elite-AL Pro Dual+Hub

3 Year Solution Warranty

High-Capacity USB 2.0

USB

High Capacity+ Hub

High-capacity + convenient powered USB 2.0 hub ports for easy connection of flash drives, iPods, bus-powered hard drives, etc. Time Machine ready + great for audio/video libraries, photos, music, backup, and more!

Available from 500GB to 4.0TB!

Size	Speed	Data Buffer	USB 2.0+HUB
1.0TB	7200RPM	32MB	$174.99
2.0TB	7200RPM	32MB	$249.99
3.0TB	7200RPM	64MB	$379.99

Build your own drive!

www.macsales.com/storage

0GB 'Add your own hard drive' kits available from **$27.95**

PROSOFT Intech

Software Included $200 Value

Certain OWC and NewerTech kits include Prosoft Engineering® Data Backup 3, NovaStor NovaBACKUP®, & Intech SpeedTools Utilities...*$200 Value!*

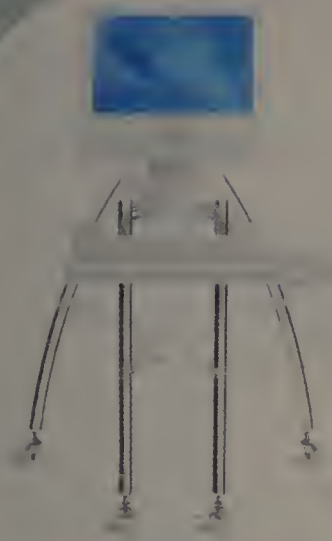
NuPower, NewerTech, NewerTech arrow logo, miniStack, Guardian MAXimus, and Perfect Fit Solution logo are registered trademarks and USB 2.0 Universal Drive Adapter, Voyager, NuCube, and the Newer Technology, Inc. logo are trademarks of Newer Technology, Inc. OWC and OWC logo are registered trademarks and Mercury On-The-Go Pro, Mercury Elite-AL Pro, and Other World Computing are trademarks of Other World Computing. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice.

ADVERTISERS INDEX

Interact with the companies whose products and services are advertised in Macworld.

ADVERTISER	INTERACT	PAGE NO.
1&1 Internet	1and1.com	22-23
3 Cats and a Mac	3caam.com	88
4 Over Inc.	4over.com	93
Academic Superstore	mw.academicsuperstore.com	94
Acme Made	acmemade.com	88
Ambrosia Software	ambrosiasw.com/mw	9
APC	apc.com	49
BeLight Software	belightsoft.com	33
Biomorph	biomorph.com	88
Booq LLC.	booq.com	10
Buffalo Technology	buffalotech.com	15
Circus Ponies Software, Inc.	circusponies.com/trialmw	54
Cognito Software, Ltd.	moneyworks.ca	87
Creative Juices.	bigposters.com	92
DriveSavers Data Recovery Inc.	drivesavers.com	92
ESS Data Recovery	datarecovery.com	90
Etymotic Research	etymotic.com	69
FatCow Hosting	fatcowhosting.com	90
Fujitsu	us.fujitsu.com/scanners/macworld	13
G-Technology	g-technology..com	67
Global Print Runner	printrunner.com	92
Granite Digital	granitedigital.com	89
GTSecurikey	securikey.com	88
IGG Software	ibank3.com	32
iHome	ihomeaudio.com	5
Insight Cruises	insightcruises.com	51, 88
I.R.I.S	irislink.com/macworld	40
Journey Educational	journeyed.com	95
JVL Corp.	jvl.mobi	8
Mac of All Trades	macofalltrades.com	89
Macally	macally.com	41
Macessity	macessity.com	88
MacHighway	machighway.com	94
MacMall	macmall.com	C4, 2, 82-83
Mariner Software	marinersoftware.com	87
Marware	marware.com	89-90
Micromat	micromat.com	7
MicroReplay	microreplay.com	89
mStation Audio	mophie.com	35
Neat Company	neatreceipts.com/mac	39
Other World Computing	macsales.com	C2-1, C3, 84-85
PowerMax	powermax.com	95
Rain Design	raindesigninc.com	87
Ramjet	ramjet.com	95
RichardSolo.com	richardsolo.com	11
Scosche	scosche.com	47
SeafoodByNet.com	seafoodbynet.com	92
TechRestore	techrestore.com	91
ZAGG	zagg.com	53
Zco	zco.com	53
Zoo Printing	zooprintingtrade.com	91

April 2009, Volume 26, Number 4 Macworld (ISSN 0741-8647) is published monthly by Mac Publishing, L.L.C. Editorial and business offices: 501 2nd St. 6th Flr., San Francisco, CA 94107, 415/243-0505. Subscription orders and inquiries should be directed to 515/243-3273. Subscription rates are $34.97 for 12 issues, $59.97 for 24 issues, and $79.97 for 36 issues. Foreign orders must be prepaid in U.S. funds. Add $10 per year for postage for Canada; add $25 per year for air freight for all other countries. Canadian GST Registration #868421876. Periodicals postage paid at San Francisco, California, and at additional mailing offices. Canada Post Publications Mail Agreement No. 40612608. Return undeliverable Canadian addresses to: Bleuchip Intl., P.O. Box 25542, London, ON N6C 6B2. Postmaster: Send address changes to Macworld, Subscription Dept., P.O. Box 37781, Boone, IA 50037-0781. Printed in the U.S.A.



iGo $333

i360° $39.90

mStand $49.90

c|net Editors' rating Very good

iWoofer $119

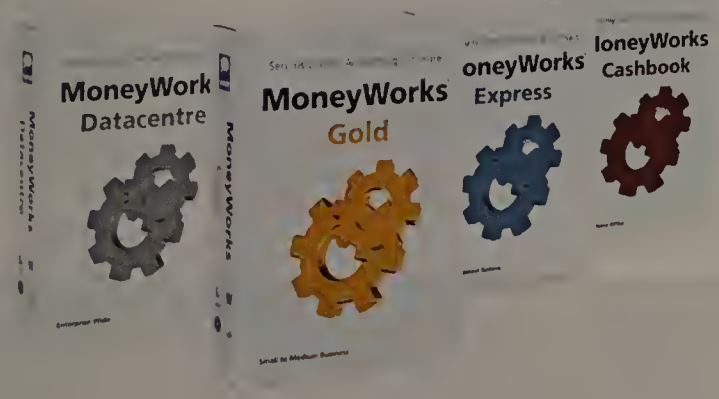
iLap from $49.90

www.raindesigninc.com 1 800 797 7321 rain

Now available in the USA

MoneyWorks®

Seriously Good Accounting Software for your company



www.moneyworks.ca

info@moneyworks.ca

800•818•6955

Cognito systems inc.

Ask for MoneyWorks at your local Apple store.

Why I use

MacGourmet Deluxe

Judy Capper
Sea Chef.
Boat Captain.
MacGourmet Deluxe User.

"After eighteen years at sea, I have stacks of notebooks filled with my recipes and sea stories. I chose a MacBook and MacGourmet Deluxe to organize volumes of recipes for later publication. When offshore, I also use MacGourmet Deluxe to create my menu plans."

You organize your digital photos and make playlists of your music. Now, with MacGourmet Deluxe, you can bring your recipe collection into the digital age.

- Create, edit and share your recipes
- Organize your cooking and wine notes
- Plan your daily or weekly meals in iCal
- Even create and print your own cookbook!

Available at: www.marinersoftware.com or these fine retailers:

MARINER SOFTWARE

Apple Stores UK · Fry's Electronics · MICRO CENTER · amazon.com and you're done. · Writers Store · J&R

Get The Key To
MacBook Security

A Mobile Mac Essential
Macworld

GTSecuriKey®
The Cross-Platform Security Leader.™
800.986.6578
www.securikey.com

Brilliant
recipe management

A Cook's Books
RECIPE MANAGEMENT
Try the demo:
www.3caam.com

www.InSightCruises.com/Mac9
July 11-17, 2009
Mac Mania™ 9

biomorph®

ergonomic
furniture solutions that work
work standing or sitting - anytime
Biomorph furniture adjusts to a perfect fit, with our full line of desks, chairs, lighting and add-ons for all applications.
order at biomorph.com catalog 888 302 DESK

ACME MADE®
DESIGNED
PROTECTION™
www.acmemade.com

Granite
D•I•G•I•T•A•L
We Are The Rock Solid Storage Experts

SATA USB FIREWIRE SCSI

SATA HOT-SWAP STORAGE SYSTEM

eSATA LCD Hot-Swap
Dual Bay System #7408

For more information please visit us at:
www.granitedigital.com
Toll Free: (888) 819 - 2190

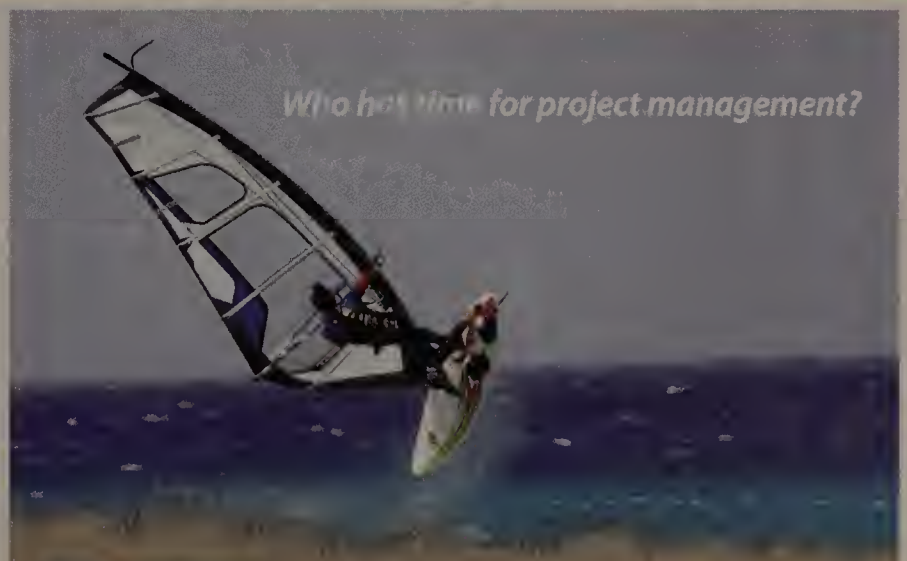
Mac of All Trades
Your Solution for Buying and Selling Used Macs

www.macofalltrades.com

SCREEN REPAIR
LOGIC BOARD REPAIR

- Laptop Repair
- We BUY/SELL/TRADE-UP fully REFURBISHED APPLE and major brand PCs
- We buy DEFECTIVE Apple computers
- We repair liquid spills

MicroReplay
(800) 960-1140
www.MicroReplay.com



The time saving features in Project X let you focus on your project quickly and get on with your day.

Your time is valuable. Spend it your way!

Project X, award-winning project management software for your Mac, takes a redefined approach to traditional project management by focusing on collaboration, communication, and organization, making project management easier for the rest of us.

Macworld BEST OF SHOW 2008

Download your FREE trial version at:
www.projectx.com/trial
Version 2.0 now available!
Project management for the rest of us.

MARWARE
www.marware.com
954.927.6031

FatCow

This year, beef up your Web Site.

FatCow – the udderly unique Web host.

The FatCow Web Hosting Plan

- Unlimited Disk Space for Your Files
- Unlimited Data Transfer
- Unlimited E-Mail Accounts
- Easy-to-Use Site Building Tools
- Free Blogging & Forum Tools
- ShopSite Online Store
- Customizable Control Panel
- Free Ad Credits on Google and Yahoo

25% OFF for MacWorld Readers

$66 a year

Our Service Pledge to You ~ The HeiferCratic Oath

FatCow takes professional and friendly support to an udderly new level: we pledge to honor our loyal customers by meeting the highest customer service standards. No bull!

The HeiferCratic Oath is just one more thing that separates us from the rest.

24x7 Customer Support
30-Day Money-Back Guarantee

1.866.544.9343 Visit us today. www.fatcow.com/macworld

Go GREEN

Introducing Marware's line of eco-friendly case solutions. These innovative new case solutions from Marware are made of a combination of recycled plastics (PET) and all natural materials (corn polymers), reducing the use of PVC and materials that end up in land fills. Providing you with a stylish, environmentally friendlier case solution for your new iPod® or iPhone®

EcoVue™
for iPhone™3G/for iPod® touch 2G

EcoRunner™
for iPod® nano 4G

MARWARE® www.marware.com 954.927.6031

FAST. RELIABLE. SECURE.

Data recovery from all hard drives, all platforms...

- DOD-Level Security
- Superior, 24/7 Service
- Confidentiality Guaranteed
- Affordable, Up-front Pricing (no hidden charges)
- High Recovery Success
- Class-100 Clean Room Lab Standards
- Patent-Pending Recovery Technology
- Complete Computer Forensic Services

ESS DATA RECOVERY LABS
www.datarecovery.com
800.237.4200

110 N. Research Drive, Edwardsville, Illinois | 1241 Quarry Lane, Pleasanton, California
6043 Hudson Road, Woodbury, Minnesota

TechRestore

help is on the way

Electronics Repairs & Upgrades

Overnight - Nationwide

- Local Pickup & Delivery
- Fast Friendly Service
- 2000+ Local Drop Off Locations

1-888-64-RESTORE
(1-888-647-3786)
8am - 5pm Pacific M - F
techrestore.com

Mac Laptop Restore

iPod & iPhone Restore

Mac mini & Apple TV Restore

GameRestore

Free Repair Diagnosis & Free Shipping On All Repairs! **24-Hour Turnaround!**

Overnight LCD Repairs From $299

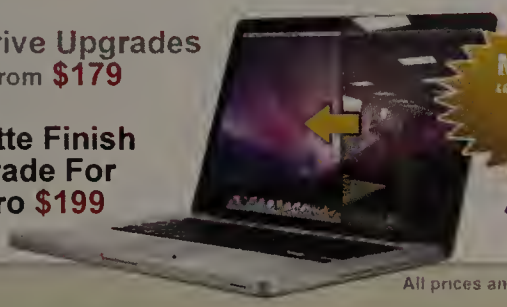
iPod Screen Repairs From $59

Hard Drive Upgrades Up To 250GB From $99

X-Box 360 PSP PS3 Wii DS

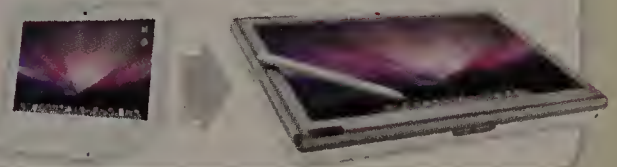
Overnight Hard Drive Upgrades Up To 500GB From $179

Overnight Matte Finish Screen Upgrade For MacBook Pro $199



Macworld Expo "Best Of Show" Macworld Magazine

Overnight Modbook Upgrade Service From $1299



All prices and offers are subject to change. Please see our website, techrestore.com, for the most current information.

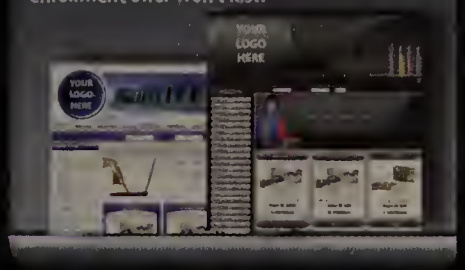
FASTEST TURNAROUND • GREAT PRODUCT OPTIONS • PERSONAL SERVICE • PHOTO-QUALITY PRINTING

LARGE PRINT JOB CAPACITY

If you have several million in print volume, we have the capacity to get your work done! With four 40" Komori presses; two 6 color, and two 8 color, and in-house bindery equipment, we can handle ***ANYTHING*** you require. Focus on ***GROWING*** your business and let us take care of the printing.

FREE BRANDED WEBSITE

Zoo Printing is accepting applications for state-of-the-art branded websites for our trade customers. These websites function ***JUST LIKE*** our website. Your website will order, charge, and ship all ***BLIND*** for you to maintain your relationships with your clients. Act now, this enrollment offer won't last!



ZOO OFFSET VS. DIGITAL

Traditionally, digital printing offered quick turnaround, small quantities, but inferior quality at high prices. Now with the new technology at Zoo Printing, ***WHY*** go digital when you can order ***OUR*** offset printing with the cheaper prices, faster turnaround, and superior "photo-quality". We now offer ***SHORT RUN*** options for most of our products!

PAPER OPTIONS

- 100# Gloss Book + AQ
- 100# Gloss Book + UV (NEW!)
- 100# Gloss Cover + AQ
- 14pt Gloss Cover + AQ
- 14pt Gloss Cover + UV
- 16pt Gloss Cover + UV (NEW!)
- 100# Uncoated Cover (NEW!)
- 70# Uncoated Text
- 60# Gloss Label Stock

ZOO PRINTING IS GOING GREEN!

At Zoo Printing we don't just support our vendors efforts to Go Green. We actively seek out and implement ways to be as eco-friendly as possible.

NEW EAST COAST LOCATION COMING 2009!

ZOO East Coast

ZOO West Coast

1000, 8.5 X 11 Brochure 100lb Gloss Text 4/4 $180
Full color on both sides with aqueous coating

1000, 2 x 3.5 Business Cards 14pt C2S 4/0 $15
Full color on one side with UV coating

1000, 4.25 x 6 Postcards 14pt or 16pt C2S 4/4 $55
Full color on both sides with AQ or UV coating

ZOO PRINTING

www.zooprinting.com

310.253.7751

2-3 BUSINESS DAY TURNAROUND

PrintRunner®
Quality Printing For Less

Full Color Offset Printing at Amazing Prices

Business Cards 100 qty. starting at $9.95
Brochures 250 qty. starting at $219.95
Postcards 100 qty. starting at $35.95
Letterhead 500 qty. starting at $125.00

20% OFF your first order
Use this code at checkout:
MACWORLD20
One coupon per order.
Expires 5/31/09

BROCHURES • POSTCARDS • BUSINESS CARDS • FLYERS • CATALOGS • STICKERS • MAGNETS • POSTERS & MORE!

NEXT DAY TURNAROUND • CUSTOM PRINTING • COMPLETE IN-HOUSE PRODUCTION • OUTSTANDING CUSTOMER SERVICE

Call Now! 1-888-PRINT-89 or Order Online: www.PrintRunner.com
9673 Topanga Canyon Place Chatsworth, CA 91311

Back up today or call us tomorrow

The grim reality is that sooner or later all digital media–from hard drive to flash memory–will fail. When this happens there are only two things you can do:

1. Restore your data from your backup system
2. Call DriveSavers **800.440.1904** (24/7)

At DriveSavers, "We can save it!" is not only our slogan, it's our solemn pledge. And we have the track record to prove it.

We've invested over 20 years developing proprietary techniques and millions of dollars creating an advanced facility to save the most valuable data in the world–Yours!

You can find other alternatives, but you won't find a better one. Take our Virtual Tour and see for yourself: **drivesavers.com**

DRIVESAVERS® DATA RECOVERY
We can save it!

©DriveSavers, Inc. 2008 DriveSavers Data Recovery. We can save it! and the life ring logo are registered trademarks of DriveSavers, Inc.

Take our Virtual Tour at drivesavers.com

BIG COLOR POSTERS | BANNERS | CANVAS | MOUNTING | LAMINATION

BIGPOSTERS.com at HUGE DISCOUNTS

2' x 3' Color Poster $25
18" x 24" Archival Canvas $24
SPECIAL OFFER RETRACTABLE BANNER STAND $125 33" x 78" Banner Stand Includes Graphic & Nylon Case
Retails for over $350
Use Promotion code: MACWORLD

Sizes up to 60"x100ft | High Resolution | Color Accurate
Various media: Paper, Canvas, Vinyl, Fabric, Backlit & more

888-880-HUGE

Creative Juices Printing & Graphics | 96 Gazza Blvd Farmingdale | NY 11735 | tel. 631.249.2211 | www.bigposters.com

No Minimums | No Voicemail - We Answer our Phones 9am-5pm | Fast Turnaround

SeafoodByNet.com
Fresh from the sea to your doorstep!

The best in FRESH, hand selected seafood and Certified Aged Angus Beef. Call 815.337.4028 or visit www.SeafoodByNet.com to order.

Sign up for our FREE Fresh Club Newsletter for latest DEALS on your favorites!

INTRODUCING

GRAND4MAT.COM

POSTERS, BANNERS 4 INDOOR, OUTDOOR

POWERED BY: 4OVER

TRADE SHOW GRAPHICS
BILLBOARDS
POSTERS
CAR WRAPS
VINYL BANNERS
RETAIL STORE DISPLAYS

MEETING & EVENT SIGNAGE
LARGE CHECKS
POP DISPLAYS
WINDOW CLINGS
CUSTOM CUTOUTS
(UP TO 60" X 120")
AND MORE...

NEW

Please call or visit **grand4mat.com** for more information.

Grand4mat.com does not offer installation services, printing service only. Product availability may vary. Certain products are subject to minimum quantity order.

4OVER, INC.
PERFECTING YOUR PROFITS
4OVER.COM

SUPER TRADE PRINTER

P: 877-782-2737 F: 877-972-9117

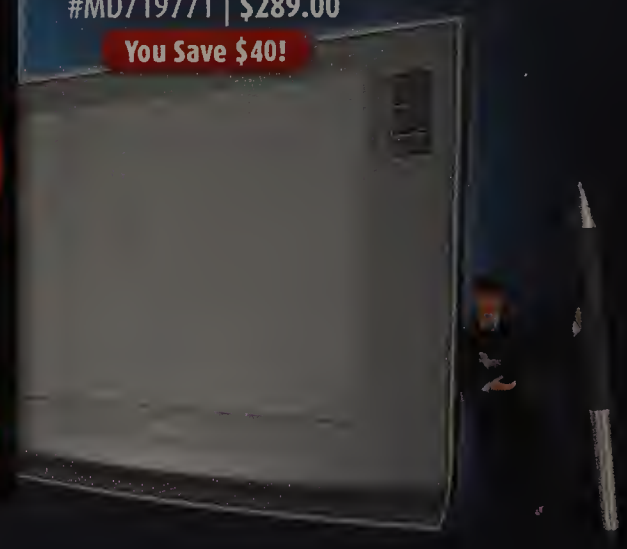
Graduates, Stock Up while you still can!

» Students, parents, and teachers save up to **85% off** with **academic discounts** on top brand software and hardware.

#MD784349 | $149.95
You Save $350!

CS4 Design Premium
Student Edition
#MD962669 | $398.95
You Save $1400!

Wacom Intuos3 6" x 8"
#MD719771 | $289.00
You Save $40!



ACADEMIC SUPERSTORE

Use **Promo Code 515202** when placing your order and receive **FREE Sony Ear Buds** with your order of $100 or more! Hurry, this offer ends 7/4/09. Prices are subject to change.

Visit us online or call now: **www.AcademicSuperstore.com/mwap | 1-800-218-7455**

.Mac is dead! Long live Web Hosting for Mac Users!

MacHighway®

Real Web Hosting for Mac Users, by Mac Users, Since 1997

Compatible, Reliable, Complete.

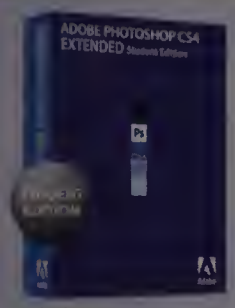
100% Powered by Wind Energy. We work with Windows and Linux users too!

New Hosting packages with full-featured control panel, blogs, ecommerce features, galleries, and much more available right now. Host your site for as little as $29.95/year. See for yourself.

www.MacHighway.com | 1-800-604-9960

MacHighway is a registered trademark of Category 99, Inc. All Rights Reserved.
Mac and .Mac are registered trademarks of Apple Inc. MacHighway is not affiliated with Apple Inc.

Student & Educator Software Discounts!



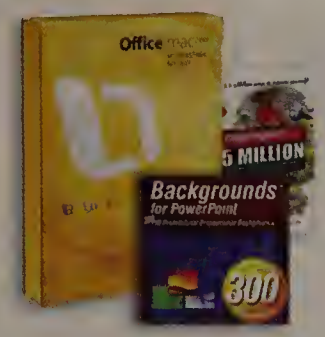
Adobe Photoshop CS4 Ext.
SRP $999 **$199.98**

Adobe CS4 Design Standard
SRP $1199 **$299.98**

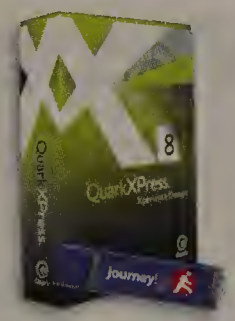
Adobe Student Editions available to college students only.

Adobe CS4 Design Premium
SRP $1799 **$399.98**

Adobe CS4 Web Premium
SRP $1199 **$349.98**



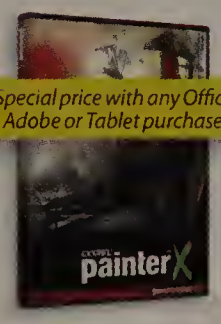
Microsoft Office Mac 2008 Bundle
SRP $200 **$149.98**



QuarkXPress 8.0 w/ 2GB Flash Drive
SRP $830 **$199.98**

Tech-Rover Laptop Backpack
SRP $39 **$19.98**

Special price with any Office, Adobe or Tablet purchase!



Corel Painter X
SRP $429 **$49.98**

SAVE UP TO 85% OFF Retail!

SAVE $10 off orders over $99!

Expires 5-31-2009

To redeem, use Priority code: MW10

journeyEd.com **www.JourneyEd.com/MW** 1.800.874.9001

Pricing may vary and subject to change without notice.

High-Performance Mac Memory

Lifetime Warranty

Ramjet

Same Day Shipping
1-800-831-4569
Mon-Fri 9am-6pmCST

Memory Upgrades

iMac Intel
1Gig - $29
2Gig - $59

Mac Pro
2Gig - $95
4Gig - $159
8Gig - $309

G4 DDR
512mb - $35
1Gig - $69
2Gig - $129

G5 DDR2
1Gig - $49
2Gig - $69
4Gig - $135

MacBook
DDR2 Kits
4GB - $118
6GB - $258
DDR3 Kit
4GB - $99

MacBook Pro
DDR2 Kits
4GB - $118
6GB - $258
DDR3 Kit
4GB - $99

Speak to a Memory Expert

Secure Online Ordering at
WWW.RAMJET.COM

1-800-831-4569

Professional, Fast, Dependable

THINK GREEN. SAVE GREEN.

Trading in your old Mac with PowerMax is not only good for the environment, but will save you money. We'll give you in-store credit for your computer -- use it toward a new, used or refurbished Mac, or any of the 10,000 products we sell. Call one of our Mac experts today: **888-769-7629.**

POWER MAX.COM

Authorized Reseller

6077A SW Lakeview Blvd. • Lake Oswego, OR 97035
888-769-7629 • Fax: 503-624-1635 • Local: 603-624-1827

Note: Due to Apple legal regulations, first-time customers of PowerMax cannot order Apple products online. But, just give us a call and we'll be happy to answer all your questions. *Must be requested at time of purchase. While supplies last.

What's Wrong with This Picture

The video business doesn't get the digital market

At this year's Macworld Conference & Expo, Apple Senior Vice President Phil Schiller announced that by the middle of this year, the entire iTunes Store music catalog—10 million songs strong—would be available in DRM-free versions.

I was thrilled. The music industry finally seemed to get it: Given the chance, consumers will pay a reasonable price for unprotected, high-quality music that they can use as they wish. Unfortunately, the video industry isn't as enlightened.

Not a Pirate—Yet

You can buy a TV series from the iTunes Store in high-definition (HD) format. But while you can rent HD movies, you can't buy them.

I understand that different corporate entities, with different competitive concerns, control the two media. Those differences result in different rules. But I shouldn't have to worry about that. When I want HD content, whether it's a movie or a TV show, I should be able to buy it. Right now I can't.

And the video industry is imposing these restrictions on the people least likely to steal content: consumers who buy audio and video through the iTunes Store. Yet the video industry treats us like pirates who can't wait to upload our content to rogue servers across the Internet.

If I wanted to steal movies instead of buying them from iTunes, it wouldn't be hard. Let's say I wanted to own *Tropic Thunder.* One Google search turns up dozens of versions of the film, all available as simple downloads. And those stolen copies wouldn't be DRM-protected, so they easily could be played on any video-capable device.

In other words, by making it difficult for honest consumers to purchase and use its products, the video industry could be encouraging the very behavior it seeks to stop.

The Price Is Not Right

I'm also annoyed by the pricing of TV series in the iTunes Store.

For example, the new season of *24* (www.fox.com/24) started recently. So I went to the iTunes Store to see about buying a season pass. Then I saw the cost: a whopping $60. That's too expensive for something that has no physical media, is encumbered by DRM, and can't be burned to DVD. At $45, even the non-HD version is expensive. And like all iTunes Store videos, it's nonburnable.

The alternative: I could watch the show for free on Fox's Web site. In full-screen mode, the video looks perfectly fine. Though I couldn't play it on all my devices, free sure beats $60.

If I really wanted *24* on all my devices, and didn't want to pay $60, I could get it the same way I could get *Tropic Thunder*: all current episodes of the new season are readily available online. Legal? No. A tempting alternative? You bet.

The iTunes Store's current video policies are hurting only legitimate customers.

By setting that ridiculous price point, Fox has not only lost a sale, but it has also given people who would otherwise pay the network money an incentive to find alternatives. I would have gladly paid $30 or $35 for the season pass; it'd be nice to view it on any device, and I'd like to support the series.

Instead, I've chosen to record *24* on my TiVo, and then watch it (skipping commercials) on the big screen. It's not as convenient as having it available everywhere I go, but the price is right.

The vendors of some shows in the iTunes Store seem to get it. You can buy 16 30-minute episodes of *The Daily Show with Jon Stewart* for $10. But *The Daily Show* is an exception; current seasons of most TV series seem priced to dissuade, rather than encourage, purchase.

If prices for TV shows in the iTunes Store were halved, I think the sales volume would increase dramatically. It's not like there's much direct cost involved in producing a downloadable version of a finished TV show. The money the studios would earn through increased volume would be almost pure profit. So why are they asking such outrageous sums for current (and older) TV series?

I hope the video industry will see what the music industry has done and take steps to adjust its rules on HD content, its stance on DRM, and its pricing policies. As things stand now, however, video producers are treating their customers like thieves and encouraging them to find alternative solutions that are less costly, unencumbered by DRM, and more agreeably priced. Some of those alternatives are legal; others are not. While pirates will continue to pirate, the iTunes Store's current video policies are hurting only legitimate customers.

Rob Griffiths is a senior editor at *Macworld* and, despite the temptation, doesn't pirate his video content.

PHOTOGRAPH BY PETER BELANGER

www.macsales.com

Other World Computing
Serving the Mac Universe since 1988

Always On The Go?

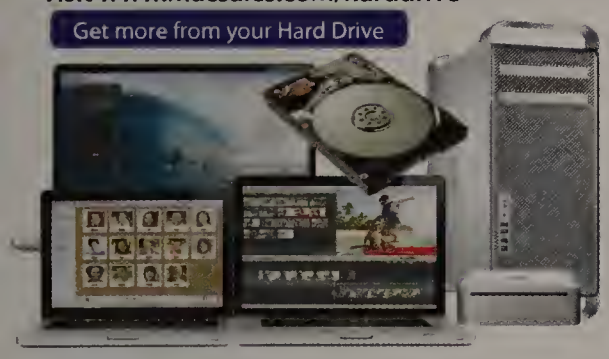
Mobile lifestyle solutions

"...performs at same of the fastest speeds we've seen in a portable drive." - Macworld

OWC Mercury On-The-Go Pro™ Portable Solutions *Up to 500GB!*
Pocket sized and no AC power required — true, one-cable Plug and Play! **3 Year Solution Warranty**
Visit www.macsales.com/otg

HARD DRIVES

Notebook Drives up to 500GB, Desktop Drives up to 2.0TB
Visit www.macsales.com/harddrive



DOCKING SOLUTION

The NewerTech Voyager™ Dock is the ultimate upgradeable External Solution. Select your own drive, then Plug & Play! Upgrade with a new drive at ANYTIME.

- *Easy data access from ANY 2.5" or 3.5" SATA HD up to 2.0TB!*
- Great for data transfer and using an existing hard drive after a drive upgrade.
- Fully bootable external drive solution.
- All connector cables included.
- Quad Interface.

Macitynet.it BEST OF EXPO MWSF 2009

www.macsales.com/newertech

Experience the OWC difference

- *Free online installation videos.*
- *Free lifetime U.S. based technical support.*
- *Industry leading warranty terms.*
- *Live Chat support...even on weekends.*
- *Expert installation services with fast turnaround.*
- *Award-winning support...BizRate Circle of Excellence 5 straight years.*

5th Year in a Row! GOLD HONOREE BizRate 2008 a Shopzilla Company

At OWC Our Customers Come 1st!

Quality Products
Competitive Prices
Expert Support

Battery Replacement Service & Repair for Apple® iPod® & iPhone®

NuPower® Batteries + OWC® Service & Repair equals less worry & longer run times!
Visit www.macsales.com/repaircenter

RoHS Compliant

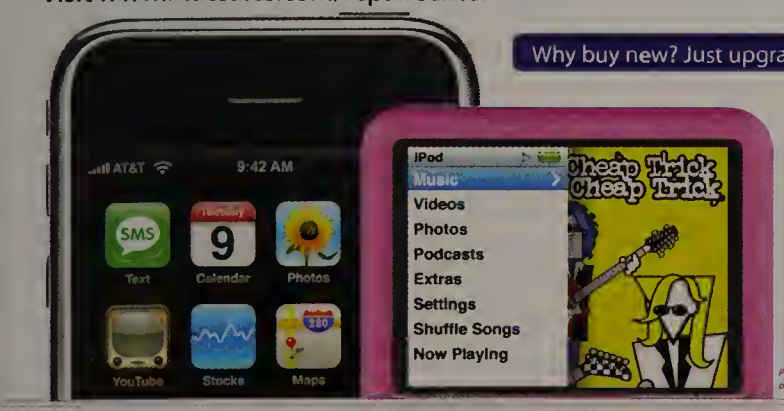


Photo courtesy of Cheap Trick

newertechnology

Newer Technology NuPower Hi-Capacity Battery Replacement for Apple iPods. Deliver up to 20 hours of runtime and *up to 114%* more capacity*

Batteries offered for the below models
- iPod 1st, 2nd, 3rd, 4th, and 5th Gen
- iPod nano 1G, 2G, and 3G
- iPod mini

HIGHLY RECOMMENDED

NEW!

Newer Technology NuPower Battery Replacement 'TurnKey' Service for Apple iPhone '1G'.

**Battery capacity gains are compared vs. original Apple factory included battery*

Batteries for Apple® PowerBook® & iBook®

NuPower® Batteries give you the longest run times with up to 64.5% more capacity. Designed and BUILT in the USA to last longer than other batteries too! Protect our environment – Free Return Shipping of your old battery for proper disposal.

Visit www.macsales.com/laptop

More Time Unplugged!

newertechnology

Perfect Fit Solution

RoHS Compliant

Batteries offered for the below models
- PowerBook® G4 Titanium
- PowerBook G4 Aluminum 12", 15", 17"
- PowerBook G3 Lombard, Pismo, Wallstreet
- iBook G3 12", 14", and Clamshell
- iBook G4 12" and 14"

PRAM Batteries www.macsales.com/newertech
Is your computer forgetting what time and day it is? Your clock battery is failing, time to replace it!

i2 GREEN-IT COMPANIES

McAfee SECURE

Learn more about OWC's new 'Green' Headquarters.
Conservation & Recycling for a greener tomorrow
http://www.macsales.com/LEED/

School/Corporate Purchase Orders accepted with approved credit.

DISCOVER MasterCard VISA JCB PayPal

Visit: **www.macsales.com** *Call:* **800.275.4576**

NuPower, NewerTech, NewerTech arrow logo, and Perfect Fit Solution logo are registered trademarks and the Newer Technology, Inc. logo and Voyager are trademarks of Newer Technology, Inc. OWC and OWC logo are registered trademarks and Mercury On-The-Go Pro and Other World Computing are trademarks of Other World Computing. Other marks may be the trademark or registered trademark property of their owners. Prices, specifications, and availability are subject to change without notice.

Amp Up Your Creativity!™

The tools that pros need at prices they deserve!

6 Months Same as Cash!
Valid for purchases over $500. Call for details.

Up to $200 Cash Back!*
On Apple computers. After mail-in rebate.

FREE Parallels Desktop!*
After mail-in rebate with purchase of an Apple computer.

NEW 15" Aluminum MacBook Pro
2.4GHz with 250GB Hard Drive and 2GB SDRAM
FREE Parallels Desktop!* *Includes NEW iLife '09!*

~~$1994~~ - $100 mail-in rebate* = **$1894!*** #7684020
*After mail-in rebate. See our two-page ad inside this magazine.

SAVE $644!
13" MacBook™ Air 1.6GHz
2GB SDRAM and 80GB HD
FREE Parallels Desktop!*
original price $1794
~~$1249.99~~ - $100 = **$1149.99!*** #7373085 *After mail-in rebate.

SAVE $100!
17" MacBook™ Pro 2.66GHz
Glossy Display, 4GB SDRAM
and 320GB HD
FREE Parallels Desktop!*
~~$2794~~ - $100 = **$2694!*** #7732924 *After mail-in rebate.

SAVE $50!
13" MacBook™ 2GHz
2GB SDRAM and 160GB HD
FREE Parallels Desktop!*
~~$1294~~ - $50 = **$1244!*** #7684018 *After mail-in rebate.

SAVE $35!
Microsoft Office 2008
for Mac Student and
Teacher Edition
list price $149.95
now **$114.99!** #7352258

SAVE $91!
2TB LaCie Big Disk
Extreme+ Hard Drive
FireWire 800, FireWire 400
and USB 2.0 inputs
was $299.99
now **$208.99!** #7284700

Authorized Reseller

*See our two-page ad inside this magazine.
Source code: MACWORLD

MacMall
Your #1 Apple Superstore!

Call 1-800-321-7532 or visit macmall.com